CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS, 1952

MONDAY, JULY 9, 1951

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10:30 a. m., pursuant to recess, in room F-39, the Capitol, Hon. Kenneth McKellar (chairman) presiding.

Present: Senators McKellar, Hayden, Ellender, McClellan, Robertson, Young, Cordon, Ecton, Holland, Stennis, and Cain.

CORPS OF ENGINEERS

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES

STATEMENT OF BRIG. GEN. P. A. FERINGA, PRESIDENT, MISSISSIPPI RIVER COMMISSION

MEMPHIS HARBOR, TENN.

Chairman MCKELLAR. The committee will be in order.

General Feringa, you proceed where you left off last Friday.

General FERINGA. Thank you, sir.

Mr. Chairman, you will recall and the committee will recall that last Friday we had started to talk about Memphis Harbor and that I stated that I enjoyed talking about Memphis Harbor. I also feel that I sit at the feet of an expert, because there is no one who knows more about the valley and Memphis than you, sir. But if you will allow me to proceed in my less capable manner, I would like to repeat that the total cost of Memphis Harbor is $21,600,000, that there has been allotted to date $6,095,000, and that the estimate before you—and I am talking about the budget estimate, not the reduction by the House—amounts to $1,400,000.

Memphis Harbor is not a project for Memphis itself. It is a natural result of a very prosperous valley having a tremendous amount of navigation on the Mississippi River. I think Memphis Harbor is an indication of what the Mississippi Valley means from the defense standpoint.

TRAFFIC ON MISSISSIPPI RIVER

I have here a chart which is an accurate chart. We have to collect commercial statistics by law, and therefore I can vouch and swear

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to their accuracy. This chart [indicating] for the last 10 years shows how the traffic has increased on the Mississippi River. The peak during the war years, while we were moving more traffic than we ever moved before was in 1944, and amounted to over 35,000,000 tons. This is barge traffic. This is traffic that moves between New Orleans to Minneapolis and St. Paul, exclusive of the traffic that moves on the Ohio, the Missouri, and the Illinois Rivers. This is on the Mississippi River itself.

FREIGHT TRAFFIC ON MISSISSIPPI RIVER

You will notice we had a peak year in 1944 and a redistribution of the traffic-handling facilities after the war and a drop in tonnage. Then in 1947 it went up, also in 1948, in 1949, and now in 1950 we are close to 40,000,000 tons of traffic.

I would like to mention that it is not merely oil going upstream; but that there is every type of traffic that the United States needs, sir.

Chairman McKellar. Would you be good enough to find the picture that you had just a few minutes ago, that you took yourself, I believe, of the traffic going downstream?

General Feringa. Yes, sir.

Chairman McKellar. Senator Stennis knows all about it, but I wanted Senator Cordon to see that.

Senator Cordon. I saw that and got the explanation, Mr. Chairman.

General Feringa. Then if I may for a minute state that this is a towboat proceeding down the river. These are oil barges returning with a deckload of army jeeps and army trucks.

Chairman McKellar. I could not count the jeeps, but there were 30 automobiles on it.

General Feringa. There must be a couple hundred jeeps on the barges. There is a load of pipe.

Chairman McKellar. From where did that pipe come?

General Feringa. Pittsburgh, Youngstown, around that part of the country; maybe some from Chicago, Midland Steel, but most of it comes from around Pittsburgh.

Chairman McKellar. From Pennsylvania?

General Feringa. Yes, sir.

The importance of this picture, in my opinion, is to indicate that the traffic moves both ways, upstream and downstream.

Senator Stennis. Mr. Chairman, may I ask one question? In your millions of tons of freight now that means millions of tons of freight originating on the Mississippi River; is that correct?

General Feringa. No, sir. It may originate on the Gulf of Mexico and proceed up the Mississippi.

Senator Stennis. It does not mean that much passed by Memphis?

General Feringa. Not necessarily, sir.

Senator Stennis. But it means the total freight that passed up and down the Mississippi, excluding the Missouri and the Ohio?

General Feringa. That is correct, sir, and that is net tonnage. That is freight carried, and does not include the barges or towboats themselves.

I would like to bring out on this chart, sir, that it is not only oil—oil, of course, is the biggest amount—but there are textiles, allied products; a lot of sugar, sirup, molasses; grain, more and more grain

coming down the river; food products; forest products, paper and pulpwood; coal and coke, not so much; petroleum; iron, steel and other metals coming down, both in the original and as manufactured products; tremendous quantities of sulfur coming up from south of New Orleans and from the Gulf coast; ores such as bauxite, etc.

Chairman McKellar. Does the sulfur come largely from South America?

General Feringa. No, sir, the sulfur comes largely from Texas on the Gulf and from Louisiana below New Orleans, and a tremendous amount of salt, salt being used in the chemical industry. A tremendous amount of it comes out of those salt domes west of Morgan City in Louisiana.

Senator Stennis. Where does the ore come from?

General Feringa. The ore would mostly be bauxite coming up from South America. There is a lot of bauxite, as you know, Senator McClellan, in Arkansas, and most of the bauxite, as I understand it, is sort of rich in silica.

Senator McClellan. They mix the South American ore with it.

General Feringa. They mix it up and beneficiate it so they can run it through the normal process, sir.

IDEAL LOCATION

Now that is the reason for Memphis Harbor: A rich valley, a fine river, and of course a need for taking care of the traffic.

Chairman McKellar. Now that is going to be built on what you call Presidents Island?

General Feringa. Yes, sir. This photograph shows Presidents Island to which I am now pointing. It shows Memphis, and last Friday I asked the committee to look and see what a wonderful prosperous city it is, how every square foot of land, except this beautiful park they have here, is taken up for housing and industrial purposes. I asked you to recall farther upstream is the Wolf River and that Wolf River is crowded and there is no further room.

CONTRIBUTION BY LOCAL GOVERNMENT

The Federal Government is undertaking this part of the work [indicating], the building of the dam across Tennessee Chute and then the building of a fill in this area. The balance of the work at greater cost to the local people must be done by the city of Memphis, Shelby County, and the State involved.

Chairman McKellar. Is Memphis and Shelby County cooperating with you in every respect?

General Feringa. Without a question, yes, sir.

Senator Cordon. Does the $21 million represent the total cost of all cooperators or just the Federal share?

General Feringa. No, sir, the $21,600,000 is the Federal part and all the cooperators will have to pay $28,654,600. The local part of the work will consist of all the railroad tracks, the sewage-disposal plants, the building of the wharves, and all the myriad things that will have to be done there.

Chairman McKellar. From the way the businessmen and bankers talk down there, I have come to the conclusion that they are the most

enthusiastic people I have ever seen about getting this project completed. They consider it absolutely necessary for the prosperity of Memphis. In addition to that, I think they have already let out some of the space for warehouses, have they not?

General FERINGA. Yes, sir, I think that is correct. Of course they are doing that wisely because it must be operated in such a way that it is not a profit to any one individual but a benefit to the whole valley and to the whole United States. I think they are proceeding with that and proceeding well, sir.

Senator CORDON. I do not know how you are ever going to do that without making a profit for individuals. That will be a problem.

General FERINGA. That is their problem, sir. I think they are doing pretty well.

Senator CORDON. Now I see what I take to be a canal or waterway leading in there. Is that a Government obligation?

General FERINGA. Yes, sir.

Senator CORDON. You mentioned there was a dam somewhere.

General FERINGA. This [indicating] was part of the Mississippi River called Tennessee chute. A dam has been built across the head of Tennessee chute. This work is complete. We are going to excavate this channel in here so that the barges will have access to all this industrial area.

Senator CORDON. How wide will it be and how deep?

General FERINGA. Twelve feet at mean low water and about 300 feet wide.

MAINTENANCE COSTS

Senator CORDON. What kind of maintenance problem will be involved?

General FERINGA. There will be some maintenance but I do not think it will be high. I think the estimate is $100,000 a year. The material, the spoil which is dredged out of this canal will be used to build up this area.

Senator CORDON. That area is owned by whom?

General FERINGA. By the city, the county, or harbor district.

Senator CORDON. Not privately?

General FERINGA. Not privately, sir. We did not get started until we had assurance that it would not be owned privately.

Senator ELLENDER. As I understand it, the whole island has been purchased by the city of Memphis?

General FERINGA. I think that is correct, sir. I know all this area on which we are going to work has been bought by the port authority.

Senator ELLENDER. In other words, all the land contigous to the channel—the port—is publicly owned?

General FERINGA. That is correct, sir.

DREDGING OF CHANNEL

Senator CORDON. May I make another inquiry with regard to the construction problem? You are going to dredge the channel. You are not going to levee the channel. It will just be an area that is deeper than the surrounding water area?

General FERINGA. No, sir, because this whole fill will be above flood level, so we will not have to levee.

Senator CORDON. Take on the lefthand side as we look at it, that is water and that water runs off the channel on the east, I take it, whatever the direction is.

General FERINRA. Yes, sir.

Senator CORDON. Are you going to put any barrier between the channel and that water area?

General FERINGA. We are going to put a small levee along here on this land side [indicating].

Senator CORDON. I am speaking of down at your channel area.

General FERINGA. Right here, sir?

Senator CORDON. Yes.

General FERINGA. No; there will not be any levee there. That will be all water. This picture was taken when the river was low.

Senator ELLENDER. General, how much will the water rise and fall during flood?

General FERINGA. I do not have the figures for Memphis in my mind. At Vicksburg, 225 miles south, there the gage varies from 0 to 50.

Senator ELLENDER. Fifty feet?

General FERINGA. That is for Vicksburg, sir. Memphis would not be quite as much.

Senator ELLENDER. Now is all of that taken into consideration when the wharves are built for loading and unloading ships?

General FERINGA. Yes, sir.

Senator ELLENDER. In other words, that is one of the troubles at New Orleans where the ships during high water are virtually over the levee top whereas during low water they are way below it.

General FERINGA. During high water you can see the ship higher than New Orleans and during low water below it.

Senator ELLENDER. That is right.

Senator MCCLELLAN. General, have you placed in the record a chart of figures showing the increase in traffic on the river during the past few years?

General FERINGA. Yes, sir.

Senator MCCLELLAN. Have you already placed that in the record?

General FERINGA. Yes, sir; I mentioned the statistics from this chart just before you came in, Senator McClellan.

Senator MCCLELLAN. If you already have, it will not be necessary to go over it again.

General FERINGA. If I may again, sir, I am not sure I told this for the record. In 1944 the peak war-year tonnage, we carried about 35,000,000 tons. In 1950 we carried close to 40,000,000 tons.

Senator MCCLELLAN. In other words, it is increasing a million tons or more each year?

General FERINGA. Yes, sir. Next year it is going to be more than that.

Senator MCCLELLAN. The point I wanted to make is that this is a Federal project. I do not think we should just emphasize the benefits to the local area but it is a benefit to the whole Nation, the commerce of the entire Nation.

Chairman MCKELLAR. It is a cooperative arrangement.

Senator MCCLELLAN. Yes, and affects the prices of certain commodities by reason of having that cheaper transportation. The whole Nation benefits from it, not just the local area.

General FERINGA. You are completely right, Senator McClellan, and just a few minutes ago the chairman brought out some of that material goes to Pittsburgh, Minneapolis, some to Kansas City, some to Chicago, so the entire area benefits.

Senator CORDON. Is there any lessened price of petroleum products within the market range of that vast river transportation artery as a result of the petroleum shipped by barge?

General FERINGA. I imagine there is. I cannot see it in my own gasoline bill but I am positive there is.

Senator CORDON. Sometimes I wonder if we are not maintaining our transportation arteries for the benefit of the shippers rather than the ultimate consumers.

General FERINGA. I do not think so, sir.

Senator CORDON. Mr. Chairman, if there are any figures on them I would like to see them.

Chairman MCKELLAR. General, will you look into that and send the figures to us so they may be made a part of the hearings?

General FERINGA. I shall be glad to do so, sir, and you will have something to put in the record.

(The information referred to is as follows:)

The benefits of cheap water transportation are derived directly from the low cost of water transportation and indirectly from the lowering of costs of rail transportation in the regions where water transportation is available. The manner in which these savings or benefits accrue to the ultimate consumer are complicated and varied involving such matters as value of raw products, creation of work opportunities, rates of income, wealth for the people, and new traffic for other modes of transport at points of transfer.

Specifically, an example of how these savings in transportation costs for gasoline and petroleum products are passed on to the consumer was given by Sidney A. Swensrud, when vice president of the Standard Oil Co. of Ohio. In testifying before the Temporary National Economic Committee of the Seventy-sixth Congress, Mr. Swensrud said:

"There has been considerable interest in where the consumer finally will get these savings. There is properly much general interest in the extent to which lower costs resulting from improved equipment or techniques are passed on to consumers in the form of lower prices. For gasoline, lower costs are obviously of various types; they may result from a decrease in prices for crude oil, from lower transportation, refinery, or marketing costs, and from better realizations on other petroleum products. Lower costs resulting from the use of new equipment which requires a capital investment are much more important in the petroleum industry than cost reductions resulting from the adoption of new methods which require no capital investment.

"There is apparently in some circles a naive belief that there is something wrong unless prices are automatically lowered by the exact amount of saving achieved. This belief completely disregards the way business and business men actually function. How the "passing on of lower cost" actually occurs can best be described by an illustration that we have tried to picture here, a typical example of how reductions in cost tend to be passed on.

"Let us say here is city A and here is the historic source of supply for this city. The refinery is located down here at city B. We ship up here by rail at a cost of 2 cents a gallon, let us say. Now, someone finds that this river has been made navigable and they can now barge up this river and there is perhaps a good location for a refinery down here. Maybe there is crude oil nearby; so they build a refinery here and they barge up from this refinery up to some point where they establish the terminal near city A.

"Now, let's assume that the cost of the barging is one-half cent a gallon. Now, this refiner C then has an advantage of 1½ cents a gallon; not quite that much because he has had to put in a water terminal; so he has now the problem of reshipping, but he has a substantial advantage, let us say, none the less.

"Now, he is going to begin to look around city A for some places to sell some of this gasoline and take advantage of these savings he has made. But typi-

cally he is not going to get very many dealers unless he makes them some kind of propositon that is more favorable than the one they are already enjoying: so he will perhaps offer to sell some dealer—if we said that the wholesale price was 5 cents and the freight 2 (that makes 7), you might say that he would make an offer of 7 cents, but he wouldn't perhaps get very much business; so he makes an offer of 6½ cents, as little under 7 cents as he thinks will get the business, because after all he is interested in holding on to all the saving he can.

"I think we can assume that there is nothing odd about the fact that businessmen try to get as high price as they can for their product; so he makes as little concession as he can and still get some business, but after he has made concessions to two or three dealers up here in city A and signed them up, why, the refineries down here in refinery city B begin to wonder what is happening, and they don't need to wonder very long; so they decide to meet this price from the fellow in city C and so the price is down. The openly posted price is down.

"Then, if refiner C has still got some advantage left, he will tend to reduce his price again, and so it goes, until eventually slowly and irregularly the saving is finally passed on to a very large extent.

"Now the over-all evidence that the savings of this industry have passed on lies, of course, in the fact, as you saw this morning, the price of gasoline has gone down steadily over almost the entire history of this business and profits have not gone up as a percentage of the investment. They have gone down, too. So that I don't think we can doubt that the savings that this industry has accomplished have been passed on. The price has been reduced. The profits haven't greatly increased. They have not increased at all, I should say. Now, you can take more specific data—take the average retail price of gasoline today throughout the United States, which exceeds the Oklahoma price at the wholesale refinery about 7½ or 8 cents. Five or 10 years ago it exceeded it by around 10 cents. There is something like 2 cents, then, lower price at retail today relative to wholesale cost than was the case 10 years ago."

A similar statement was made in 1946 by J. Howard Marshall, president of the Ashland Oil & Refining Co., as follows:

"It is not only the towns and cities located directly upon the river itself which benefit. Let's use as an example gasoline prices at Louisville, a river point, and Middlesboro, Ky., a town in southeastern Kentucky near the Tennessee border, some 200 highway miles from Louisville. The tank-wagon price for gasoline delivered to service stations in Louisville is 10 cents a gallon, exclusive of taxes. The gasoline tank-wagon price in Middlesboro is only 11 cents per gallon, the difference being only the overland freight from Louisville to Middlesboro. Using for purposes of comparison these same two delivery points, let's observe the effect on these prices by removing the rivers and resorting to rail all the way. Based upon the Tulsa or group 3 market, the Louisville price would become 11.56 cents and the Middlesboro price becomes 12.88 cents. Louisville's price would go up 1.56 cents per gallon and Middlesboro's price would jump 1.88 cents per gallon. An almost exact duplicate of this comparison would result if the river point of Ashland, and the inland point of Pikeville, Ky., were used. It is undoubtedly true that similar results would be obtained in making comparisons between innumerable other river and inland points. That is the way gasoline prices at those points used to be computed before the competition of low-cost transportation on the Ohio River reduced the consumer's cost.

Point of comparison	Mid-continent market price	Rail freight rate	Resultant wholesale market price	Present wholesale market price	Consumer saving
	Cents	*Cents*	*Cents*	*Cents*	*Cents*
Louisville	5.00	2.51	7.51	6.75	0.76
Cincinnati	5.00	2.27	7.27	6.75	.52
Ashland	5.00	4.09	9.09	7.00	2.09
Pittsburgh	5.00	4.49	9.49	7.00	2.49
Huntington	5.00	4.09	9.09	7.00	2.09

"In pointing out the direct benefits that accrue to consumers through savings on transportation on inland waterways, it is well to keep in mind another very important source of indirect but no less important benefits. With the development of the rivers, other methods of transportation which compete for traffic must fix their rates for a particular movement so as to meet competition. In the case of the Louisville and Middlesboro example just cited, the rail rate on gasoline from the Gulf coast to Louisville is 2.51 cents per gallon, while

the corresponding rate to Middlesboro is 3.83 cents; yet the rail miles to Louisville are 747 miles as compared with 672 to Middlesboro. This means that, in this instance, 747 miles equals 2.51 cents and 678 miles equals 3.83 cents. Although I haven't stated that the difference in the mileage rates was a direct result of the presence of the river at Louisville, I am sure all will agree that it is a rather significant coincidence. The complexity of rate structure in general, the difficulties of exact calculation of the volume of consumption by territories, make it difficult to calculate all the indirect consumer savings which have been made possible by river transportation, but the preceding examples leave little doubt that the savings are enormous."

Senator CORDON. I think it is very important for the future of river transportation. What we are doing is providing a tax-free capital investment supplied without charge to transportation agencies without any benefit other than the volume of freight that is moved. There is something all wet about it.

General FERINGA. I am certain that there is a benefit that goes to the consumer. We have had some studies on it. I think we can find those studies and have them put in the record.

(The information referred to is as follows:)

The following excerpt with respect to benefits from water transportation from the report of the President's Water Resources Policy Commission, volume I, entitled "A Water Policy for the American People, 1950," was prepared in the Office of the Chief of Engineers.

"In order to translate these general estimates of total savings from inland waterways into the specific benefits that accrue to a region from the lowering of transportation costs, one must visualize the benefits to farmers of the Missouri and Arkansas Basins which would flow from increasing the value of their grain 5 to 10 cents a bushel through lower transportation charges to market; the benefits to both producers and consumers from moving the coal and other mineral forest products of the Tennessee, Arkansas, and Missouri River Basins at substantially lower rates, thus increasing their dollar value as raw materials and putting them to economic use where they now are undeveloped. One must consider how industries and industrial population concentrate around navigable water, creating work, income, new traffic for other modes of transport, and wealth for people, bringing farms and markets, producers and consumers closer together, making living conditions better for farmers and industrial workers alike." * * *

"The contention of the railroads that the benefits of transporting these commodities on the inland waterways are absorbed by a few shippers and not passed along to the public is similarly contradicted by facts. It is, for instance, conceded that the economies of moving bulk commodities on the Great Lakes and the oceans, either in the vessels of large private carriers or comon carriers, are reflected in lower prices to the public generally. Steel prices are admittedly lower because of the cheap water movement of ore on the Great Lakes and of coal on the Monongahela and Ohio Rivers to the steel mills. The price of Appalachian coal in the Northwest reflects the low cost of moving the coal on the Lakes. The farmers in Minnesota and the Dakotas get higher prices for their grain, which moves at low water rates from Duluth and Chicago to Buffalo and New York. The same conditions apply to water transportation of bulk commodities on the rivers.

"It is no more possible for shippers on the rivers to retain the benefits of low water rates for themselves than it is for Lake or ocean shippers to retain the benefits of low water rates. Under the old basing-point system, delivered prices on steel were generally quoted on the basis of rail rates, even when the shipments moved by water, so that the producers would retain the profits resulting from the savings below the rail-transportation costs. Now the universal practice is to give the buyer of the steel the benefit of the lower water rates when he ships by river. When grain began to move by barge from river elevators on the upper Mississippi and Illinois Rivers to Chicago and other markets, the elevators purchasing the grain tried at first to keep the profits resulting from the lower river rates. Competition soon forced them to give the benefit of the lower rates to the farmers in higher prices bid for the grain, amounting to 3 to 5 cents per bushel above the prices paid on all-rail shipment.

"Prices of petroleum are often cited as evidence that the consumer gets no benefit of lower rates from water transportation. Although the great preponderance of petroleum movement is by water or pipeline, prices of finished products to consumers are traditionally based on rail-rate relationships from refineries to consuming points. It is made to appear that the consumer receives no benefit from the low transportation cost by pipeline or water, but the oil industry insists that over-all savings from transportation are reflected in over-all prices.

"If this were not true, those who advance this argument point out, their profits would be excessive and would be reflected in correspondingly abnormal tax recovery. Specific cases are cited, such as at Spokane, Wash., where the use of waterways was followed by price cuts. Further supporting the refineries' contention is the fact that, when the water movements of petroleum from Texas ports to the North Atlantic seaboard were stopped by hostile submarines, the Government paid the companies, as a subsidy, the difference between the normal lower water costs and the higher charges of shipment by railroad, through a transportation pool arrangement."

In his Rationale of Inland Waterway Transportation, dated June 9, 1941, Maj. Gen. Julian L. Schley, then Chief of Engineers, said:

"Savings in transportation costs by waterway do not stop with the shipper but are distributed through the user of the facilities to the consuming public. As Dr. Locklin repeatedly emphasizes in his Economics of Transportation, the short-time results may be quite different but the long-time effects invariably work out as described. However, the principle adds perplexing inequalities to the already complicated matter of traffic distribution for which the gradual abandonment of the 'added traffic' theory of fixing rates seems to offer the only promising solution. Once the traffic found potentially adapted to waterways has been permitted free development, overland agencies cannot successfully compete for it on a cost basis, no matter what statistical gymnastics are resorted to."

UPSTREAM TRAFFIC

General FERINGA. Here is a picture representing traffic going upstream. Here is sulfur; here are chemical products coming from the Gulf coast. Here is a typical oil tow carrying oil only, with the shaped barge in front, a shaped barge in back, and two box sections in between. That oil would go as far as Pittsburgh, as far as Minneapolis. Lots of it goes up there. It might go to Kansas City; it might go to Chicago.

That, Mr. Chairman, finishes my testimony.

Senator ELLENDER. General Feringa, reverting to the Memphis Harbor item, are any of the facilities built and in use?

General FERINGA. No, sir. The dam was finished last fall, and we have not as yet turned over any part of it to the community. We hope to do that sometime this fall.

Senator ELLENDER. That is what I was going to ask. With this appropriation, do you expect to complete enough of the work there so that it will be usable?

General FERINGA. Part of it will be usable, a very small part.

Senator ELLENDER. To what extent has the city of Memphis or local authorities there begun the construction of their share?

General FERINGA. They have not started any of their construction because they cannot do so until we turn over some of that area to them, sir. They have financed all the acquisition of lands. They have made plans, but they cannot as yet start on the construction.

Senator ELLENDER. That is partly due, I suppose, to the fact that fill has not been completed yet?

General FERINGA. That is right. There will be enough completed, I hope, this fall so they can get started in a very small way, sir.

Chairman MCKELLAR. The mayor of the city has cooperated with you in every way, has he not?

General FERINGA. Yes, sir. Bill Fowler, your friend, the city engineer, has cooperated; everyone has cooperated. I am sorry that Frank Pidgeon is not here.

Chairman MCKELLAR. I am sorry he is not here, too, because he is a great enthusiast of this project.

General FERINGA. He is a successful and well-known businessman, and is the chairman of the port and harbor commission.

Chairman MCKELLAR. Gentlemen, do any of you wish to ask questions?

Senator HOLLAND. I would like to ask a question.

General, a great many of the automobiles which move to Florida move down river on the Mississippi or Ohio or tributary streams and then up the Tennessee by barge and then are carried by these road-transport units to our State. Do you have facilities in your office to show what saving, if any, is accomplished by that river transportation which must be for many hundreds of miles?

General FERINGA. I do not have the figures in my mind or the papers before me. I think we could determine them and submit them to you.

Chairman MCKELLAR. Could you get the facts and figures in answer to that question and submit them for the record?

General FERINGA. Yes, sir.

Chairman MCKELLAR. We shall be very much obliged to you.

General FERINGA. I will mail them to Mr. Darling and Mr. Darling can take care of that.

Senator HOLLAND. Thank you.

(The information referred to is as follows:)

Savings by reason of barge transportation of new automobiles over the Ohio River to the Tennessee River and up the Tennessee to Guntersville, Ala., en route to Florida amount to 30 cents per hundredweight or $10.50 for the average 3,500-pound car. Similar savings on all water movement into the Houston, Tex. area are 60 cents per hundredweight or $21 per automobile. All water transportation to New Orleans results in a saving of 50 cents per hundredweight or $17.50 per automobile and to Memphis, 40 cents per hundredweight or $14 per automobile.

DIVISION OF COSTS—MEMPHIS HARBOR

Senator MCCLELLAN. There is one thing that is not quite clear to me. That is the amount of local contribution as compared with the total cost of the entire project. You gave it but it was not quite clear to me whether the $28 million you spoke of included the municipal, county, and State contributions along with the private industry contributions or if there are three separate factors; that which the Federal Government provides, that which the local government provides, and that which industry contributes.

General FERINGA. There are three factors. I gave you the Federal factor and the local interest factor. I do not have the slightest idea what industry will supply. Of course they must purchase and place their equipment in their buildings, and so forth.

Senator MCCLELLAN. What was the Federal Government's, again?

General FERINGA. It was $21,600,000.

Senator MCCLELLAN. And the local government contribution?

General FERINGA. $28,654,600. If you are interested, I can give you the breakdown on it.

Senator MCCLELLAN. That is all right, just the over-all.

Then in addition to that, private industry builds considerable facilities the extent of which you cannot know in advance?

General FERINGA. That is right, sir.

Senator MCCLELLAN. But they build all those facilities that they use?

General FERINGA. Their factories, their warehouses, all their handling equipment, and so forth. Yes, sir, that would come on top of that.

Senator MCCLELLAN. That is all, Mr. Chairman.

Chairman MCKELLAR. Has this large traffic been of any benefit to the little city of West Memphis across the river, which I think is about 4,000 people?

General FERINGA. Mr. Huxtable is here. He lives in West Memphis. All I can say is West Memphis during the 3 years I have been in the valley on my present detail has grown tremendously. I think Mr. Huxtable is your best witness for that.

Chairman MCKELLAR. I can remember the time when that whole area was largely all water, stagnant water, water that stayed sometimes the year round.

Senator STENNIS. Is President's Island part of Arkansas or Tennessee?

General FERINGA. That is part of Tennessee.

Senator MCCLELLAN. Do you think we had better lay claim to that in order to get some kind of compromise out of Tennessee?

Senator CORDON. You are looking downstream on this picture?

General FERINGA. You are looking downstream.

PRESENT PORT FACILITIES

Senator CORDON. What port facilities does Memphis have independently of this proposed project?

General FERINGA. Only Wolf River, sir. Wolf River comes in the Mississippi River. It would be right along in here [indicating].

Senator CORDON. You do not have a photograph of that?

General FERINGA. No, sir.

Senator CORDON. What will happen to those facilities?

General FERINGA. They will stay active the way they are, sir. There is not room enough for more of them at the present location.

Chairman MCKELLAR. Many applications have have been made for this place, I know. Whether any places have been allocated, I do not know.

Senator CORDON. Are they municipally owned on Wolf River?

Chairman MCKELLAR. They have some that are municipally owned but there is a good deal of privately owned.

Senator CORDON. I mean controlled by local agents.

Chairman MCKELLAR. We have a Rivers and Harbors Commission.

General FERINGA. That is all I have to say, sir.

Senator CORDON. Do you have any information with respect to this other installation on Wolf River, with respect to the ownership of it?

General FERINGA. I have not, sir. I think it is nearly all privately owned. There may be a public terminal, I do not know. I would have to look it up. I know it is crowded.

Senator CORDON. You say Wolf River is not publicly owned, and you will have a competitive proposition, one paying taxes and one tax free, perhaps. I do not know; what are the facts? If the information comes before this committee, it should not be one-sided information.

Chairman MCKELLAR. General, will you get those facts and put them in the record?

General FERINGA. I will try to find out, sir.

Senator STENNIS. Mr. Chairman, for my one question I want to commend the witness for his very fine presentation of this entire lower Mississippi Valley picture. It was very graphically presented here Friday and fairly and impartially but still with a lot of professional enthusiasm well justified.

General FERINGA. Thank you, Senator Stennis. It is easy to be enthusiastic about the valley.

Chairman MCKELLAR. I do not think I have seen a witness who was able to give so many answers to questions.

Senator CORDON. I have never seen a man filled with so much enthusiasm as the general is.

Chairman MCKELLAR. I commend him in the highest terms.

Senator CAIN. Mr. Chairman, the witness is prohibiting himself from ever retiring other than in the valley. Do I understand that is correct?

General FERINGA. That would be my wish, sir.

Chairman MCKELLAR. I have one regret about the whole term of his office, and that is that he does not live in Memphis instead of Vicksburg.

Senator CORDON. I understand that the general will furnish the information with reference to this possible competitive situation?

Chairman MCKELLAR. Yes, sir.

General FERINGA. I will do so about the possible competitive situation between Wolf River and President's Island.

(The information referred to is as follows:)

Eighteen industries are located along Wolf River from its mouth to Hall Creek, which is the upstream limit of the maintained channels. These industries are all privately owned except the public mooring facilities owned by the city of Memphis which are opened to all on equal terms. The industries are in general located on privately owned tracts of land, although some do occupy city-owned sites on a long-term lease basis. Industries occupying city-owned sites pay taxes on the improvements constructed by them. One industry rents a city-owned site which already had improvements on it, namely, a grain elevator, and, therefore, the terms of the lease take this into consideration. There are no additional sites adjacent to the navigable portion of Wolf River available for expansion of industry. The sites which will be provided by the Memphis Harbor project now underway will in all probability be furnished by the Memphis Port and Harbor Commission to industries on a long-term basis similar to those prevailing on the Wolf River Harbor. There is no objection by local industries to the Memphis Harbor project. Adequate public terminal facilities will be constructed and will be open to all on equal terms. Therefore it is believed that there will not be unfair competition between Memphis Harbor project and Wolf River Harbor.

NO OPPOSITION TO MEMPHIS HARBOR IMPROVEMENT

Senator ELLENDER. Does the record show any opposition from that source?

General FERINGA. No, sir, there is no opposition. It is all cooperation.

Senator CORDON. That would appear to be the best evidence.

Chairman MCKELLAR. Mr. Frank Pidgeon, one of our leading businessmen down here and who is just as enthusiastic about this as General Feringa, was to be here this morning, but his wife is very ill and he could not come. I hope that I can have him here later. He can answer all your questions.

Senator CORDON. From all the facts presented, the public necessity would probably outweigh any adverse effect, if any there be, on the installations further up the river, but I think the record ought to cover them.

Chairman MCKELLAR. Do you have anything else that you would like to add?

General FERINGA. No, sir, except to voice my appreciation for appearing before you and your committee.

STATEMENT OF R. W. CRAWFORD, MAJOR GENERAL, UNITED STATES ARMY (RETIRED)

Chairman MCKELLAR. The next witness will be Gen. R. W. Crawford.

General CRAWFORD. My name is Maj. Gen. R. W. Crawford, United States Army, retired. I appear here this morning to speak for Mr. Frank Pidgeon. I live in Memphis.

Mr. Frank Pidgeon was the chairman of the Port and Harbor Commission that has charge of the Memphis Harbor. He has devoted years of effort and study to it. He expected to be here but his wife is stricken seriously ill and he could not come. He asked me to present a brief statement for him which I will hand to the reporter and call attention to the fact that he had appeared before the House Committee on Appropriations, page 713 of part 2 of that record. In that testimony he has answered many of the questions that have been propounded here this morning, how the city is doing, how they are prepared to do it, what they intend to do.

If there are any questions, while I am not able to answer them myself I will get the answer and insert them in the record.

Chairman MCKELLAR. Are there any questions that the committee members wish to ask the General? Well, there seem to be no questions.

(The letter of Mr. Pidgeon is as follows:)

PIDGEON-THOMAS IRON CO.,
Memphis 2, Tenn., July 6, 1951.

Hon. KENNETH D. MCKELLAR,
Chairman, Senate Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR: Regret that conditions beyond my control prevent my appearing before your committee in person.

I am deeply interested in the lower Mississippi valley.

In the interest of conserving your and the committee's time, I will not file a complete statement, because, having appeared before the Appropriations Committee of the House, my statement is a matter of record in part 2 of the report of the hearings before the subcommittee (p. 708).

Flood control in the lower Mississippi valley is vitally important to the millions of us who live behind the levees and the favorable consideration of your committee will be deeply appreciated by all of us.

Kindest personal regards.

Sincerely,

FRANK PIDGEON,
President, Pidgeon-Thomas Iron Co.

Senator McKellar. Who is the next witness?
General Crawford. Mr. J. Lester White.

STATEMENT OF J. LESTER WHITE, DIRECTOR, DEPARTMENT OF PUBLIC WORKS, STATE OF LOUISIANA

FLOOD-CONTROL PROJECT, LOWER MISSISSIPPI RIVER

Mr. White. Honorable chairman and members of the committee, my name is J. Lester White, director of the Department of Public Works of Louisiana, Baton Rouge, La. I am a civil engineer by profession and director of the department of public works.

We again appear before you with a plea to accelerate the flood-control projects on the lower Mississippi. We realize that the present instructions are to decrease or not allow any civil functions that are not directly connected with the national emergency, but we cannot agree that the flood-control projects on the lower Mississippi are civil functions that have no connection with the national emergency.

We know that the present conditions and the unfinished projects for the control of floods in the Mississippi is causing monetary loss to our several States as time goes on, and we feel that any monetary loss is a loss to the Government. Therefore it affects our national economy.

Now we have here this morning five of the seven States in the lower Mississippi, members from the respective States that I would like, with the permission of the committee, to introduce, who will express their views and the views of the people they represent. With your permission I would now like to introduce Mr. Peyton Berbling, of Cairo, Ill.

STATEMENT OF PEYTON BERBLING, CORPORATION COUNSEL, CITY OF CAIRO, ILL.

FLOOD CONTROL, MISSISSIPPI RIVER LEVEES, ILLINOIS

Mr. Berbling. Mr. Chairman and members of the committee, I have prepared a written statement which I would like to hand to the reporter.

Chairman McKellar. Would you like to put it in the record?

Mr. Berbling. I would like to put it in the record and then talk.

Chairman McKellar. Give us the high lights of your statement.

Mr. Berbling. I have submitted a written statement to the House committee which is a matter of public record. I will not burden this committee with that, but it is a matter of record stating the position that Cairo takes.

Cairo has been called the barometer of the river, as most of you who live on the river know, and I want to appear here not asking anything particularly for the city of Cairo, because we have what we think is one of the greatest levee structures in the world. We think we are as near impregnable as a man can devise against flood, but I am here in the interest of the lower valley for this reason.

I flew from Cairo yesterday to Washington. As the plane lifted from the Cairo airport all you had to do was look out over the left

wing and you saw the Mississippi in flood. The Mississippi was in flood from Cairo to St. Louis. Then as we left Lambert Field, headed for Washington, you could look out, the plane circled to the north and you could see the Missouri River in flood.

Senator ROBERTSON. I heard over the radio last night it is 4 feet above the flood stage, and a number of those levees have broken.

Senator CORDON. Were those levees constructed by the Corps of Engineers?

Mr. BERBLING. Some of them, some of them locally. Most of the levees in the upper valley are small levees. From Cairo south they are big levees.

Chairman MCKELLAR. Are those that you are now speaking of under General Feringa?

Mr. BERBLING. No, sir. General Feringa has jurisdiction which begins at Cape Girardeau and extends southward. Most of that, Senator, is land south of the levee that you see, but all that water has to pass between the levees from Cairo to the Gulf, and it has to be confined in order that it does not do the damage down there that it is doing up in Missouri and part of Illinois.

LEVEES BROKEN

One of the Illinois levees went out yesterday morning, called the Grand Tower area, a rich farming land.

As we crossed the Mississippi south of Chester yesterday, I saw another levee that had broken. Those are broken levees. Around St. Charles, Mo., the levees have broken.

Chairman MCKELLAR. St. Charles is south of St. Louis?

Mr. BERBLING. No; north of it.

I merely bring that to the attention of the committee to emphasize the fact that all of this water has to pass between these main line levees going to the Gulf and it has to be confined in order that we do not have broken levees down there or flooded farm lands. There is literally millions of dollars worth of damage already that has been done.

Senator ROBERTSON. Does the Senator from Illinois, Mr. Douglas, know about the farm lands in Illinois being flooded by the Missouri River?

Mr. BERBLING. He should.

Senator ROBERTSON. Do you think he will know about it when we get up on the floor today?

Mr. BERBLING. He should, sir. Both Senator Douglas and Senator Dirksen should know it.

Senator ROBERTSON. Whose responsibility is it to let him know if he does not know it, the Senator from Virginia or the counsel for the city of Cairo?

Mr. BERBLING. I will do that, sir.

RESTORATION REQUESTED

I just want to say this, and I will close, because you have some more important witnesses. To me the control of floodwaters in the lower Mississippi and even in the upper Mississippi is national defense for the simple reason that, as we have said before, it is the bread basket

of the United States. It is not only that, but a great deal of the industrial might of the United States is located behind those levees. You who live in the South know that the South is becoming industrialized very greatly and a lot of this industrial might is behind those levees all the way from Cairo to the Gulf. To me it is national defense that we prevent floods from destroying those crops and destroying those industries. For that reason I would urge this committee that, if possible, they restore the $2,000,000 cut that was made by the House committee because that $2,000,000 cut means that somebody is going to lose out or not get the relief they should have in the way of flood control.

1952 BUDGET ESTIMATE

Chairman McKellar. As I understand it, the budget first recommended $74,000,000.

Senator Ellender. It was reduced to $65,000,000 and then $61,000,000.

Mr. Berbling. That is my understanding, the House committee cut it to $59,000,000. I would strongly urge that this committee, if possible, restore this $2,000,000.

Chairman McKellar. Is it not true that this water transportation for two of the outstanding products of the United States, oil and steel, which are very heavy, is the cheapest method of transportation?

Mr. Berbling. There is no question about that, sir.

I would like to say, in support of what General Fergina has said, that we who live at Cairo see these barges go down the river with automobiles three or four tiers high. We see oil going up the river all the time. There is no question that river transportation is the cheapest kind of transportation we have.

Senator Cordon. Do you happen to know who profits by that lessened transportation cost?

Mr. Berbling. The consumers should, Senator.

Senator Cordon. I know they should, but I want to know who does.

Mr. Berbling. I certainly would not be in a position to give that answer.

Senator Cordon. It may be well for you gentlemen who are enthusiastic about this waterway to look into this matter.

Chairman McKellar. General Feringa has told us he will give us the information, and I am sure he will.

Senator Cordon. Somebody ought to go into that some time.

DAMAGE TO FARM CROPS

Senator Robertson. In your prepared statement, Mr. Berbling, you say with reference to the flood waters of the Missouri:

"The total damage of these flood waters will probably run into many millions of dollars."

That is a rather indefinite term. When we get on the floor they deal with billions. "Many millions" might not be impressive unless we can pin-point them. Could you give us a little more definite estimate? Of course it has to be preliminary because you do not know what is growing on every acre that is flooded or how long the flood is going to last.

Mr. BERBLING. It will have to be merely an estimate, for this reason: It is wheat land that has been flooded just when wheat was ready to cut; it is corn, soybeans, and crops that were planted.

Senator ROBERTSON. At this time of the year when you flood the wheat is gone?

Mr. BERBLING. That is right. When you flood cotton at this time it is gone.

Senator ROBERTSON. Corn is only about knee high now?

Mr. BERBLING. It is killed. It is too late to plant another crop.

Senator ROBERTSON. You can flood corn; if you do not wash it down and if the water does not stay on it long, it will still grow; but the wheat is gone, the soybeans are gone?

Mr. BERBLING. The river will be probably at the crest several days and most of it is covered, sir.

Senator ROBERTSON. Nobody can definitely prove you are wrong; are you willing to give an estimate on the money?

Mr. BERBLING. No; I cannot do that. I can say in our county alone, which is a small county, that 5,000 acres are under water now.

Chairman MCKELLAR. That is the county in which Cairo is located?

Mr. BERBLING. That is the county of Alexander. We have what is known as Dog Tooth Bend and all in that area.

Senator ROBERTSON. How many acres of wheat will be flooded?

Mr. BERBLING. I know in one place where that Grand Tower levee went out yesterday that they estimated between 5,000 and 10,000 acres.

Senator ROBERTSON. That is easy to figure out.

Mr. BERBLING. It is not all wheat, of course, but there is quite a bit of wheat.

Senator ROBERTSON. Ten thousand acres with twenty bushels to the acre would be how much?

Senator CORDON. How much?

Mr. BERBLING. I do not know how much wheat sells for.

Senator ROBERTSON. I am talking about fertile land, not Oregon land.

Chairman MCKELLAR. Can you get those figures and put them in the record?

Mr. BERBLING. It will be purely a guess.

Senator ROBERTSON. $40 an acre. Wheat is worth $2.35 out there.

Mr. BERBLING. I am not a farmer; I am a lawyer.

Senator ELLENDER. Mr. Berbling, you say you are interested in these levees, and General Feringa is in charge from Cape Girardeau down south. Now, who has jurisdiction of the levees to which you refer?

Mr. BERBLING. It is the Corps of Engineers but it is a different——

Senator ELLENDER. Do you know whether or not any appropriations are now pending in order to increase the size of the levees that are now broken?

Mr. BERBLING. I would think so, sir, because that is the St. Louis division which takes you up to Kansas City.

Senator ELLENDER. The amount now being asked, of course, is to be spent from Cairo south.

Mr. BERBLING. That iis right.

Senator ELLENDER. And it would not affect the upper river.

Mr. BERBLING. That is right.

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Senator CORDON. Mr. Chairman, at the appropriate time will we have from the Corps of Engineers the best data—it will have to be an estimate even in their hands—on the actual loss throughout this great area from floods of last year? That ought to be more than an estimate; that ought to be the fairest estimate and the best estimate they can get this year as to those losses. If they can break them up with respect to the tributaries or the area, I think it would be helpful. I think that sort of thing ought to be in the record. I have listened to this pork-barrel stuff long enough myself, and I would like to get the figures in there.

Chairman MCKELLAR. I think that is right, and I believe Colonel Potter, who is here, may be able to furnish that.

(The information referred to is as follows:)

Flood damages in the Missouri River Basin were relatively light during the past year prior to the severe floods of July 1951, and amounted to only about $20,000,000. On the average, however, average annual damages of about $60,000,000 may be expected under present conditions; and Missouri Basin flood damages in 1947 exceeded $150,000,000. In the upper Mississippi area, including the Red River of the North Basin in the Dakotas, flood damage during the past year has amounted to about $40,000,000, which amount is also below the average annual flood damage which may be anticipated in this area.

ESTIMATED DAMAGE IN ST. CHARLES AREA

Mr. BERBLING. Senator Robertson, might I say this? In the St. Charles area alone the St. Louis News estimated the damage at $25,000,000.

Senator ROBERTSON. That is in line with Senator Cordon's suggestion that we get these specific figures here. They may say that $2,000,000 is a waste and extravagance, we need to economize, let us cut it out. If we can prove that one section of this entire river basin in recent weeks suffered a loss of $50,000,000, we have something tangible to talk about.

Senator STENNIS. Mr. Chairman, this big flood that General Feringa testified about in 1927 was estimated for the lower Mississippi Valley to have done damage in the amount of $2,000,000,000. That is a fairly accurate figure. That was in 1927.

Chairman MCKELLAR. Yes; it was a tremendous loss. We did not have the levees then that we have now. We did not have the revetments.

Senator ELLENDER. As was pointed out, the flood of 1927 was what gave birth to the plan that is now in effect.

Now let me ask you this: You are familiar with the floods of 1927?

Mr. BERBLING. I have lived all my life with them.

Senator ELLENDER. Now insofar as you are able to observe in Cairo and other sections south of Cairo, has the plan worked well?

Mr. BERBLING. Up to now, sir, it has worked very fine.

Senator ELLENDER. You have no doubt that its completion will show better improvement as to floods?

Mr. BERBLING. I think it will go as far as man can devise at the present time, sir.

Senator CAIN. What percentage, if you know, sir, of the levee construction and maintenance has been or is the responsibility of the local government?

Mr. BERBLING. What percentage?

Senator CAIN. Approximate percentage.

Mr. BERBLING. I cannot answer that. When the Government comes in under the United States engineers and builds a levee, the local authority, whether it is city, county, or drainage district, whatever it happens to be, must furnish the right of way and the earth. The Government will then build the levee and turn it back to the local authorities. That is the way it is done in Cairo. I assume that is the way it is done all over. The maintenance is partly local and partly the Federal Government. If it gets too big, then the Federal Government steps in.

Chairman MCKELLAR. Where is the division?

Mr. BERBLING. Like keeping small wave wash and keeping it mowed, and things of that sort, are local authority.

Senator CAIN. Let us take the levees within your own jurisdiction. How much of the maintenance is carried on by the local drainage district, city or county?

Mr. BERBLING. To the limit of tax ability.

Senator CAIN. To what extent, within your knowledge, does the Federal Government help to maintain the levees within your jurisdiction?

Mr. BERBLING. After the levees are built there is very little maintenance, Senator. There is practically none after the levees are completed. We do the mowing, we pump the seep water out, the rainwater, and keep the levee in shape. Unless something like a crevasse shows or something of that sort, then we take it.

Senator CAIN. You are saying that under normal circumstances the local body having jurisdiction maintains the levee once it has been constructed by the Federal Government?

Mr. BERBLING. Yes, sir, except in the case of a major flood; then the engineers step in.

Senator ROBERTSON. How did your city get its name "Karo" instead of "Kiro"?

Mr. BERBLING. It is called that because of similarity to the mouth of the Nile. We have the town of Thebes, the town of Metropolis, among other towns, Egyptian names, and they call it the delta of the Ohio or Mississippi.

Senator ROBERTSON. Why did you not call it "Kiro"?

Mr. BERBLING. I imagine because of its similarity to Egypt. We call the southern part of Illinois "Egypt."

Senator ROBERTSON. I thought the city of that name in Egypt was "Kiro."

Mr. BERBLING. And we call it "Karo." The southern part of Illinois is called "Egpyt." Everything south of the B. & O. in Illinois is called "Egypt."

Senator ROBERTSON. We say the Shenandoah Valley is as fertile as the Valley of the Nile, but more centrally located.

General FERINGA. May I interject? Right across from Cairo is Birds Point which is named after a very famous family in Virginia that settled there.

(The statement submitted by Mr. Berbling is as follows:)

STATEMENT FOR THE CITY OF CAIRO, ILL., AND THE CAIRO DRAINAGE DISTRICT

My name is Peyton Berbling, and I am the corporation counsel of the city of Cairo, Ill. I am the attorney for the Cairo drainage district, the industrial area

immediately north of Cairo, and for the purpose of this statement, the whole area is treated as one and called the Cairo area. I am also the Illinois representative on the legislative committee of the Mississippi Valley Flood Control Association.

My testimony and written statement before the Subcommittee on Deficiencies and Civil Works on the House Appropriations Committee is a matter of public record. The written statement before the House committee sets forth, I think, a fair picture of the problems and the position of the people of the Cairo area. I do not resubmit that written statement, but I respectfully call the attention of this committee to it.

The Missouri River is on a rampage now. The river is out of its banks between Kansas City and its mouth. In the last few days, thousands of acres of food crops have been destroyed. The total damage of these floodwaters will probably run into many millions of dollars. I mention this only to emphasize the importance of flood control in the lower valley. Because, all this flood water of the Missouri must pass Cairo, and from there flow to the Gulf of Mexico, and must be confined between the main line levees of the Mississippi River for almost a 1,000 miles, in order that flood damage will not be sustained in the lower valley. As I have said before, behind these main line levees is the breadbasket of America, and a large part of the industrial might of the Nation. In my opinion, protection of these areas is national defense, and our vigilance in maintaining, strengthening, and building this flood protection must not be relaxed now, or at any time.

The President and the Bureau of the Budget have recommended that $61,000,000 be appropriated for flood protection in the lower Mississippi Valley. The House cut this $59,000,000. Any further cuts would cripple the whole program.

I therefore urge this committee to recomend that not less than $59,000,000 be appropriated for flood control in the lower Mississippi Valley. A lesser amount will not permit the maintenance, strengthening, and continuance of this great flood-control system, and we may, by economizing in the wrong place, at the wrong time, lose a great part of what we have already won.

Chairman McKellar. Who is the next witness?

Mr. White. With the approval of the committee I would like to introduce Mr. R. B. Oliver, Jr., of the State of Missouri.

STATEMENT OF R. B. OLIVER, JR., CAPE GIRARDEAU, MO.

Mr. Oliver. My name is R. B. Oliver, Jr., Cape Girardeau, a lawyer by profession.

Gentlemen, there have been several questions asked which I shall attempt to answer.

Chairman McKellar. Before you do that, you say your name is R. B. Oliver, Jr., and you live at Cape Girardeau?

Mr. Oliver. That is right.

Chairman McKellar. You have lived there all your life?

Mr. Oliver. Yes, sir; 70 years.

Chairman McKellar. What is your business?

Mr. Oliver. I am a lawyer by profession. I am speaking for the levee districts in southeast Missouri. That is to say, from Cape Girardeau south which are protected by 156 miles of main stem Mississippi River levees.

Chairman McKellar. That goes down in the neighborhood of our celebrated lake country, a little offshoot of Missouri and Arkansas.

FLOOD STAGE

Mr. Oliver. You will notice Jonesboro to the left and a line straight to the east from there.

Senator Robertson. You say the river is still rising?

Mr. OLIVER. Yes, sir.

Senator ROBERTSON. I recall that I heard on the radio it was up either 26 or 26½ feet.

Mr. OLIVER. Of course that varies with different towns. At St. Charles, which is about 20 miles upstream on the Missouri from the junction with the Mississippi it was 36.34 and the highest flood we ever have had there was just a few tenths higher than that. So we are now having in the Missouri one of the greatest floods that has ever come down the river.

Chairman MCKELLAR. That depends upon the floods in the various tributaries up and down, does it not?

ESTIMATED FLOOD DAMAGE

Mr. OLIVER. I might say in response to that, Mr. Chairman, that in the States of Kansas and Missouri alone there have been over 350,000 acres inundated by this flood, and with this new rainfall, 5 inches in portions of Missouri last Friday night, there will be a greater flood coming down the stream, and the amount of damage is, and this estimate was given me, Senator, by a very reliable source, $75,000,000 as a result of this one particular flood. It is not over with.

Senator CORDON. What is the source of the estimate?

Mr. OLIVER. The Corps of Engineers, which I take to be extremely accurate, and they know what they are talking about and not given to exaggeration.

I would call your attention to some screaming headlines from the St. Louis Globe-Democrat of July 7, "Floods across State stall trains for hours. Damage in area over $4,000,000." Now that is just in one county, just in St. Charles County, Mo., which is the county adjoining the city of St. Louis.

Here is another one, "Floods strand 300 on two trains."

Chairman MCKELLAR. What is the date of those papers?

Mr. OLIVER. July 7, sir.

Senator ROBERTSON. Is this second one a Republican paper?

Mr. OLIVER. It is the St. Louis Globe-Democrat. They are both the same but from different editions. "High water stalls Wabash streamliners."

The Katy, one of the trunk line roads, the Wabash and the Frisco this past week have all been put out of commission by this flood in the Missouri River.

Chairman MCKELLAR. How long does that last?

Mr. OLIVER. We have had floods at Cape Girardeau, sir, that lasted a month, when it was above flood stage.

Chairman MCKELLAR. I am talking about this particular one. Has it gone down?

Mr. OLIVER. No, sir, it is still rising.

Now let me explain that. The first crest, the first surge has gone down, but there is a second one following which will exceed the first one.

Now here is the St. Louis Post-Dispatch, another St. Louis paper.

Mr. BERBLING. That is Democrat.

Mr. OLIVER. "River receding. Losses from flood put at $2,500,000." So you see the damage from the floor is indefinite and continuing.

When we go down to the town I come from, Girardeau, two night trains were taken off because of flood threat, with the stage at Girardeau of 37.4, with a predicted stage if it did not rain any more, and before it rained on Friday night, of 38 feet.

Chairman McKellar. Would you take the pointer and point out Cape Girardeau on the map?

Mr. Oliver. It is just above Cairo, sir. That is the head of the lower Mississippi, but every drop of this water which is coming down the Missouri is bound to pass that town and go clear on down past New Orleans.

Senator Ellender. Where is the water coming from that is flooding Cape Girardeau? Is it a break in the Mississippi River or backwater from breaks on the rivers up north?

Mr. Oliver. From the main stem flood.

Senator Ellender. On the Mississippi?

Mr. Oliver. On the Mississippi between St. Louis and Cape Girardeau. That water, of course, is coming down the Missouri.

Chairman McKellar. That is in your jurisdiction?

Mr. Oliver. The Lower River goes to Cape Girardeau. I might say that none of these levees which have broken down on the Missouri River were up to project grade as established by the United States Engineer Corps. They are all small levees that have been built by incompetent local engineers who have no concept of the amount of flood water, the volume or its velocity.

Senator Cain. Are the number and severity of your floods becoming more serious with the passage of time?

Mr. Oliver. They are very materially so and I set that out in this statement which I shall file. It is set out and I shall not read it. Between 1942 and 1946 there was only one year, that was 1946.

Senator Cain. One year that you had a flood?

Mr. Oliver. That we did not have one. We have had one every year except that.

Senator Cain. What about from 1946 to 1951?

FLOOD CREST PREDICTED

Mr. Oliver. In 1947 it was 41.90. The highest crest of all time was 42.53 in 1844. In 1947 it was 41.90; in 1948 it was 37.80. Now it is predicted it will go up to 58 if it does not rain any more.

Senator Cordon. Do you have any more information from the Corps of Engineers as to the probable effect of the completion of the Garrison Dam and Oahe Dam and others on the Missouri up above in taking off at least this peak?

Mr. Oliver. Not from the Army engineers, but I have been informed by reliable sources that the effect at Cape Girardeau would be very small. Now that is because of the tremendous number of tributaries which come into the river south of that dam.

Senator Cordon. I can understand it would not stop it all, but I would think that it would have more than a minor effect even at Cairo.

Mr. Oliver. It has some effect, of course, but it is not going to stop the floods in the Lower River, in my opinion.

Now then here is another statement from the St. Louis Post Dispatch in which it lists 40 different stretches of the main highway of the State of Missouri which are now stopped, traffic stopped and closed by

the State highway department. It follows a statement there that Gov. Forrest Smith of our State has declared an emergency exists so far as the highway department is concerned. Now that, gentlemen, is the general picture which now confronts Missouri. Yet some of our friends over in the House say, "We will cut down on the appropriations for the river." We cannot go along with them on that.

Senator CORDON. Mr. Chairman, at the appropriate time again I would like to have in this record the figures from the Corps of Engineers as to what the effect of the completion of those storage reservoirs upstream on the Missouri will have on these flood peaks. Now if this witness is correct and the effect is substantially nil, then we are pouring tens of millions of dollars down a rathole.

Senator HOLLAND. It depends on where the water falls.

Senator CORDON. No matter where the water falls, if it falls back of that dam and stops on that dam it is not coming down any river, I know.

Chairman MCKELLAR. It is my purpose to give this committee every fact possible and I want General Feringa to get such information as he can on that.

(The information requested is as follows:)

The reservoirs for flood control and related purposes which have been authorized by Congress in the Missouri River Basin as a part of the Federal flood-control program will serve, insofar as flood control is concerned, primarily for flood control in the Missouri River Basin. These reservoirs will, however, have an additional and substantial value in the reduction of flood flows and stages on the Mississippi River, when the Missouri is a large contributor of flood flows.

It is estimated that the reservoirs now authorized for the Missouri River Basin, excepting main stem reservoirs, would reduce height on the Mississippi River at St. Louis by more than 3 feet during a major flood like that of 1927; and would reduce a similar flood on the lower Mississippi at Cairo, Ill., by about 120,000 cubic feet per second—thereby reducing flood heights by about 1.2 feet and adding materially to the factor of safety of the protective works of the lower Mississippi Valley.

The Missouri River main stem reservoirs are located more than 800 miles above the mouth of that river. Their effect in reducing flood damages will be largely along the Missouri River itself, and no benefits to flood control on the lower Mississippi River were claimed for the main stem reservoirs when they were authorized. They will, however, have an appreciable effect in reducing flood flows and stages on the Mississippi River and such effects are now being reviewed.

Mr. OLIVER. I suggest to the Senator that those dams are more than 900 or 1,000 miles north of Cape Girardeau and there is a tremendous amount of rainfall that comes down through Iowa, through Wisconsin, through Illinois, and through Ohio.

Senator CORDON. I understand that fully.

Mr. OLIVER. Now I am taking too much time, but it was only in response to those questions. I have covered what I desired to say in this short statement. I would merely point out the high light of it, that the levees in Missouri, 156 miles, are more than 50 percent below the project grade.

Senator ELLENDER. You mean north of Cape Girardeau?

Mr. OLIVER. No, sir, I mean south of Cape Girardeau, in the lower river.

Senator ELLENDER. Is any part of this appropriation to be used, General Feringa, to improve the levees from Cape Girardeau south?

LEVEES SOUTH OF CAPE GIRARDEAU, ILL.

General FERINGA. Mr. Chairman and Senator Ellender, the project I described last Friday, the Mississippi River and tributary project, starts at Cape Girardeau. The funds under the general heading "Levees" will be used to gradually bring those levees which are still below grade up to grade and section. Along the main line of the river there are 1,599 miles of levees; of that 1,215 miles are up to grade and section. Some of those levees which are not up to grade and section, such as Mr. Oliver is talking about, are between Cape Girardeau and Birds Point which is across from Cairo.

Senator ELLENDER. If this appropriation of $61,000,000 is cut back, will it affect the work?

General FERINGA. It will affect the proposed work on the levees. No levees have failed in the lower Mississippi Valley, sir.

Chairman MCKELLAR. With respect to those levees that Mr. Oliver is talking about, what percentage of those levees were built by either the local authorities or by private industry?

General FERINGA. In our Mississippi River and tributaries project, sir, from Cape Girardeau south basically nearly all the levees were originally built by local interests. As we go along in our project, where we can work on that same base where those old leavees were we will do so; that is use that same foundation whenever possible. If we have to make a wider flood plain, we set them back. Wherever possible we take advantage of what has been established in the past, sir.

Chairman MCKELLAR. How many miles does that extend south of Cape Girardeau?

General FERINGA. From Cape Girardeau to the Gulf——

Chairman MCKELLAR. I mean these levees that he is talking about.

General FERINGA. Mr. Oliver is talking from Cape Girardeau to opposite and below Cairo; is that right?

Mr. OLIVER. No, sir; I am talking from Cape Girardeau coming down the river to this point here, the Arkansas line, 156 miles in there.

Chairman MCKELLAR. What is the southern point?

Mr. OLIVER. The Arkansas line here.

Senator CAIN. If it be so historically that most of the levees were once constructed and maintained by local interests, at what period did the change-over occur from local interests to the Federal jurisdiction?

General FERINGA. The local interests started way back around 1714. We took over in 1928 as the result of the 1927 flood.

Chairman MCKELLAR. By the Flood Control Act of 1928?

General FERINGA. Yes, sir.

NEW MADRID FLOODWAY, ILLINOIS

Senator CORDON. May I inquire, General, as to what value the New Madrid floodway will have with respect to this present site?

General FERINGA. The New Madrid floodway is complete, sir. It was used only once. It will not have to be used during this flood.

Senator CORDON. Why?

General FERINGA. Because the water will not be high enough. The New Madrid floodway was designed to speed the water down the

river and protect Cairo. This flood will raise the water but not to the extent where we will have to use it, sir.

Senator CORDON. The testimony here is that there are some one-hundred-thousand-odd acres that are flooded in that area above, and certainly anything that would take that water off would be highly desirable. Why can we not use the floodway for that purpose?

General FERINGA. Because it will not be needed sir, and it is not effective at this stage of the river. The effect farther upstream from using that floodway would not be immediate enough to be of advantage in that upstream area, sir.

Senator CORDON. The higher the area the more rapidly the water would run off if it had some place to go.

General FERINGA. The Mississippi River is so vast, as you know, that that effect on that area up there would be infinitesimal.

Senator CORDON. Even though it would be a few less above as I look at the picture?

General FERINGA. It is more than a few miles, sir.

Senator CORDON. How far is it from Cairo?

Mr. BERBLING. Forty miles on the river.

I can answer the Senator's question.

Senator CORDON. I would like to get it.

Mr. BERBLING. The Ohio River comes in front of Cairo. The Ohio River is low. As a result of the present situation now, with the Ohio River low and the Mississippi River in flood, the Ohio is draining a lot of water off and our stage at Cairo is only 38 feet, which is below flood stage. Although it is high at Cape Girardeau, 40 miles up the river, at Cairo it is less than flood stage right now.

Senator CORDON. In other words, as far as flood stage is concerned, there is nothing you can do?

Mr. BERBLING. That would not affect it at all. From there on it is carrying it without any trouble.

Senator CORDON. Can you not move the water faster if you have some place for it to go?

Mr. BERBLING. Yes; if you straighten it out. The fall in the Mississippi River, I understand, is about 3½ inches a mile. That is practically all over. It meanders around. That is why you get all these crooks and turns. If you straighten out you get faster fall.

Senator CORDON. Somewhere I would like to know why we have a New Madrid floodway that we cannot use.

(The information is as follows:)

The Birds Point-New Madrid floodway authorized by the act approved May 15, 1928, and constructed in accordance with the plan set forth in House Document No. 90, Seventieth Congress, is complete and has been operated once, i. e., in the 1937 flood. The floodway is an overbank type that is by law operated only if the river stage at Cairo exceeds 55 feet and at the same time the predictions are that the stage will exceed 60 feet. Its purpose is to augment the channel capacity in major floods at or near the crest of those floods so as to provide an immediate reduction in stage and prevent the overtopping of the levees and walls at Cairo, Ill. Since the flow through the floodway returns to the main Mississippi River 35 miles downstream from Cairo, the draw-down effect of the floodway is practically exhausted once the floodway area becomes filled with water to the same level as the water in the river. Moreover, the draw-down effect would not extend much more than 40 or 50 miles up the Ohio or Mississippi River above Cairo. At the present time, despite the floods on the upper Mississippi and Missouri

Rivers, the stage at Cairo, Ill., is below bankful and this floodway could not be operated, nor would it be effective in reducing flood heights at Cape Girardeau, Mo.

Mr. OLIVER. I wish to file my statement with the committee.

(The statement referred to is as follows:)

STATEMENT OF MR. R. B. OLIVER, JR.

Mr. Chairman and gentlemen of the Committee, my name is R. B. Oliver, Jr., residence Cape Girardeau, Mo., speaking for the flood-control districts located in southeast Missouri.

Missouri has many unusual distinctions, some with respect to its rivers, and consequent problems of flood control. It is the only State that is subject to devastating floods from (1) the Missouri River, (2) the upper Mississippi River, (3) the Ohio River and (4) the lower Mississippi River. All are major streams. All are recognized as potential casualty carriers.

Earlier this year (April-May) the upper Mississippi (above St. Louis) was at flood stage, but the low stages of the Missouri (Kansas City to St. Louis), and the low stages of the Mississippi (St. Louis to Cairo, plus a low Ohio at Cairo) saved a major flood of the Mississippi, below St. Louis.

As this is written the lower Missouri River Valley in Missouri is just emerging from one of the worst floods in its history. Innumerable levees crevassed and some (lower than project grade), were overtopped, reported by Associated Press at more than 100. The crest at St. Charles, Mo., a few miles above the junction of the Missouri and Mississippi, is predicted to equal, or nearly equal, the all-time high of 36.5. It has now reached 36.35 with all-time high of 36.5 in 1934 and 36.6 in 1944. Various estimates have been made as to the extent of damage done, but over the entire valley it will be in the millions. In St. Charles County alone it is estimated at over $2,500,000.

With all this water pouring out of the Missouri, had it not been that the upper Mississippi (above St. Louis) and the lower Mississippi (between St. Louis and Cairo) and the Ohio at Cairo are all at low stages, parts of the Mississippi Valley in Missouri and Illinois above Cairo would likely have been subjected to flood damage, which added to that which has already occurred in the Missouri Valley, would perhaps equal the entire present budget allocation of funds for flood control in the lower Mississippi River valley. It is only a combination of the low stages in both the Mississippi and the Ohio that disastrous flood stages have been avoided.

All of these facts point to the conclusion that the State of Missouri, although midway the length of the Mississippi, part being technically in the lower valley and part in the upper valley, is still very vulnerable to floods from all of the three great rivers, the Missouri, the Mississippi, and the Ohio Rivers. Had not the rain waters, gathered by the streams in Minnesota, Wisconsin, and Iowa, passed down the Mississippi prior to the coming of the present Missouri River flood, all protecting levees above Cairo would have been severely tested, and those not yet up to project grade, would have been overtopped.

The present disastrous flood in the Missouri in 1951, the great flood of the Ohio in 1937, together with innumerable floods of the Mississippi, largely caused by its tributaries, has caused untold economic loss to the Nation, to say nothing of the upheaval of family life, disease and pestilence that follows these major floors. The highest stage at Cape Girardeau during the present century was in 1927 when it reached a stage of 42.40, being exceeded only by a stage of 42.53 which occurred in 1844. It is now 37 feet, still rising with a predicted 38 feet, if it stops raining.

The flood stage at Cape Girardeau is 32 feet.

Cape Girardeau is at the head of the alluvial valley on the west side of the Mississippi. It is here—not Cairo—that the lower river begins. It is here that the great St. Francis Basin begins and it extends south 150 miles in Missouri and 100 miles in Arkansas to the city of Helena. Peak flood stages of the

Mississippi have been increasing at Cape Girardeau during recent years, as shown by the following table taken from official records:

Year of flood	Gage reading at Cape Girardeau	Discharge in cubic feet per second at Cape Girardeau
1844	42.53	1,375,000
1858	37.70	1,070,000
1922	38.00	893,000
1927	40.04	1,054,000
1942	36.80	611,000
1943	42.40	870,000
1944	40.80	798,000
1945	38.70	687,000
1947	41.90	837,000
1948	37.80	672,000
1951 (predicted)	[1] 38.00	

[1] If no more rain.

Notwithstanding these increases in river stages, we are particularly fortunate in that no actual overflow by the main stem Mississippi has occurred since 1927, south of Cape Girardeau, in Missouri. The record-breaking flood of that year crystallized the sentiment of the Nation for the enactment of the Flood Control Act of May 15, 1928. Shortly thereafter control of the great river began. It has been steadily progressing, but due to lack of funds, at an exceedingly slow rate of progress.

As stated, no main stem Mississippi River levee in the State of Missouri has crevassed, nor has been overtopped during the past 24 years. There have been some close calls but with the united efforts of the Corps of Engineers, coupled with support from local districts, disaster up to this time has been averted. We, however, cannot, and should not, attempt to stretch our luck too far. We cannot disregard the standards set up by the Corps of Engineers. They have set the stakes and established "project grades." Many stretches of our levees in Missouri are now below that grade. We cannot continue, and in our opinion the Congress should not continue, to disregard the sane and sensible factors of safety which must enter into and become a part of every engineering project.

The local districts have done their part. They have raised by local taxation and expended, both jointly with the Government, as well as singly and individually, many hundreds of thousands of dollars in purchasing right-of-way and building main stem levees along the Mississippi River.

The districts in Missouri contributing most for this work have been and are the St. Francis levee district of Missouri, the Little River drainage district, St. John's levee and drainage district, and the Mississippi and Scott County levee districts. Together they have contributed to the building of 156 miles of main stem levees in the State of Missouri, but more than 50 percent of this mileage is at this time below the project grade. This condition should be corrected. We have demonstrated that the stages at Cape Girardeau are increasing as the years go by. The levees along the lower river must be increased to meet the conditions brought about by leveeing the upper reaches of the river. That can only be done with adequate appropriations.

Other local districts in southeast Missouri, whose jurisdiction extends along the St. Francis River, have also expended thousands of dollars, working in conjunction with the Corps of Engineers along that river, and will be required to spend like additional sums. Work along that stream has not progressed as rapidly or to such an extent as has been accomplished along the Mississippi, but both should be and are going forward as fast as funds are available.

Much more needs to be done along both streams. From a purely economic viewpoint, we would plead for a minimum of the budget allocation of $61,000,000 for flood protection in the lower Mississippi Valley. When the pressure for funds for other phases of the national defense lessens, then, as has always been the case, closer attention can be given to local domestic problems and larger appropriations made for flood control. But even now, if it be at all possible, the budget allocation of $61,000,000 should be raised and funds made available to strengthen the weak spots along the levee line, irrespective of whether it be revetment, set back, or raising the grade. It would be to the great advantage of both the Nation,

to the lower valley and to its people, their industries, and agriculture. No fear need arise that any part of it will be ill allocated or ill spent.

In closing, I desire to express the highest respect in which the levee districts of southeast Missouri hold the Corps of Engineers and the manner in which they accomplish the objectives which they set out to attain. All they need are larger appropriations. In saying this, I am not unmindful of the pressing need for curtailment of Government expenditures, but the Government has assumed the obligation to control the floods of the Mississippi. Relying on this, the people of the great valley have devoted their lives and expended their wealth in contributing to the economic and social structure under which we are now living, and I may truthfully say that it has been no small contribution. To fail them now, or to even half-heartedly support them, by declining to supply the full budgeted amount, which is so badly needed, would be but the beginning of a far more expensive period of rehabilitation and restoration of structures permitted to go sour because of lack of proper maintenance. We feel the one small stitch should be taken now and thereby save the nine larger ones later on.

Mr. WHITE. We are sorry that the State of Kentucky is not represented this morning, but Mr. W. B. Amberg, of Hickmon, Ky., was detained on account of conflicting engagements.

Chairman MCKELLAR. Did he make a statement in the House hearings?

Mr. WHITE. No, sir; he did not make a statement.

Chairman MCKELLAR. Suppose you have him make a statement and send it.

Mr. CRAWFORD. I think he wrote a statement to his two Senators from Kentucky, as he told me, but I will ask him as soon as I get back to send a statement to you.

(The statement referred to is as follows:)

BOARD OF LEVEE COMMISSIONERS FOR FULTON COUNTY,
Hickman, Ky., July 11, 1951.

To the Committee on Army Civil Functions, Senate of the United States:

Mr. Chairman and members of the committee, the Board of Levee Commissioners for Fulton County, Ky., respectfully desires to urge your favorable action upon the budget request of $61,000,000 for the Mississippi River and tributaries. We are confident that the budget recommendation was carefully considered in its preparation and that there is urgent need for the entire fund and even more if the adopted project for flood control on the Mississippi River and its tributaries is to be successfully pursued and completed. The improvement of the river and the protection of its valley were never more important than today.

Much progress has been made during recent years under the appropriations which have been made and through the energetic effort of the Corps of Engineers carrying out work under the adopted project. Certainly it would not be in the interest of economy to curtail the program at this time when the establishment of new defense industries in the Mississippi Valley and the need for utilization of all agricultural lands are demanding more and better protection.

It is well to consider that no chain is stronger than its weakest link, and until the entire flood-control project is completed the protection which was planned and intended at the adoption of the Flood Control Act of 1928 cannot be accomplished.

The pressing need in the Kentucky area of the Mississippi Valley is for bank stabilization and improved drainage. A considerable sum of money has already been spent on these projects, but the program is not complete. To delay completion would not only endanger the work already done but would delay benefits to be derived from the complete projects.

We are sure this committee has already received ample evidence and testimony from other portions of the Mississippi Valley of the urgent need of an adequate appropriation for continuance of flood protection, and we do not care to burden the committee with repetition of details and arguments. The fair and careful consideration which your committee has always given to requests and pleas of those interested in welfare of the Mississippi Valley is greatly appre-

ciated, and we are confident that on this occasion the same considerate action will be afforded on the matter before the committee.

W. B. AMBERG,
Board of Levee Commissioners, Fulton County, Ky.

Mr. WHITE. I would like to introduce Mr. W. G. Huxtable, of Arkansas.

STATEMENT OF W. G. HUXTABLE, CHIEF ENGINEER, ST. FRANCIS LEVEE DISTRICT OF ARKANSAS, WEST MEMPHIS, ARK.

CONSTRUCTION, MAIN STEM, MISSISSIPPI RIVER LEVEES

Mr. HUXTABLE. I am W. G. Huxtable. I am chief engineer of the St. Francis levee district of Arkansas, West Memphis, Ark. Incidentally, I spend most of my money over in Senator McKellar's good town of Memphis.

I have a statement to file, which is very much similar to the one I filed in the House. I do not think it is necessary to have it printed, because they are similar.

(The statement referred to is as follows:)

STATEMENT OF W. G. HUXTABLE, CHIEF ENGINEER, ST. FRANCIS LEVEE DISTRICT OF ARKANSAS, WEST MEMPHIS, ARK.

Mr. Chairman and members of the committee, I represent the State of Arkansas on behalf of the Mississippi Valley Flood Control Association. The association is composed of the levee districts and a good many drainage districts of the lower Mississippi River Valley.

Our purpose is to explain the needs of the Mississippi Valley and the tributaries. And to ask that the amount set up by the Budget Bureau be granted or increased.

We are well aware of the large expenditures that are necessary to carry on the defense program; aid to Europe; and the other expenditures to carry on the work of the Federal Government. We are also aware of the needs for economy in all the expenditures, and for that reason, we present the following statement.

Economy is not altogether an act of withholding funds. The strength of the Nation, its ability to produce and to pay a heavy tax burden, must be sustained by the people within the boundary of the United States.

The main levees should be completed; the revetment program should be accelerated; navigation on the Mississippi River needs a good channel to bring oil to a large part of the Nation, sulfur for the war effort, and many other items of commerce that advance the public well-being. Flood control and drainage on the tributaries, including reservoirs and levees, should be advanced and not impeded. The development in the lower Mississippi Valley is at a critical stage. The people of the valley have looked forward to receiving large appropriations for completing the project before some major flood might cause disaster.

LEVEES

Main line levees on the west bank of the Mississippi River in Arkansas have an aggregate length of 393 miles. Of the 158.3 miles between the Missouri State line and the mouth of the St. Francis River, 50 miles, or 31 percent, have not been completed to the project grade and section. Of 74.5 miles between Helena and the mouth of White River, 34.15 miles, or 46 percent, remain to be enlarged; and of 160 miles along the south bank of the Arkansas River and the west bank of the Mississippi to the Louisiana State line 14 miles, or 9 percent, remain to be completed. Therefore 98.5 miles, or about 25 percent, remain to be completed to project grade and section along the Arkansas front.

The St. Francis levee district of Arkansas (Missouri State line to mouth of St. Francis River) is an example of the general condition of all the levee districts along the Mississippi River in Arkansas. This district has 158.3 miles of levee (or about one-tenth of all main-line levees on the Mississippi River) that joins 57 miles in Missouri to form a continuous levee line 215 miles in length.

Of the 50 miles of levee in this district that remains to be completed to the project grade and section, 21 miles is below grade and all 50 miles is deficient in section.

The St. Francis levee district of Arkansas was formed on February 15, 1893, and during its 58 years the property owners of the district have spent $24,244,626.36 to June 30, 1950, for the construction and maintenance of the levee. During this period the Federal Government has contributed approximately $23,000,000 to this construction. We appreciate the funds, and the excellent work done by the United States Government through the Corps of Engineers. The engineers have performed a faithful and excellent service to this levee district.

This levee protects 1,600,000 acres of fertile, flat, alluvial land which is an important cotton growing area. Other crops adapted to this area include corn, alfalfa, soybeans, truck and small grains.

The levee from Helena to the mouth of the White River (74.5 miles) protects the same type of excellent land. In addition this area is protected by 41 miles of back-water levee on the White River, which has been built to an interim grade. The 34.15 miles on the Mississippi River and the 41 miles on the White River make a total of 75.15 miles of levee that should have high priority in allotting funds for completing the project.

From the Arkansas River to the Louisiana State line 14 miles of levee remain to be completed to protect large areas in southeast Arkansas and northeast Louisiana. The 14 miles is only 9 percent of this levee, but it constitutes two weak links 9.5 miles on the Arkansas and 4.5 miles on the Mississippi.

All these levees should be completed at an early date. Any weak link could bring disaster in a major flood. Appropriations have been too meager for the past several years for these important levees, especially since the devalued dollar buys only half as much as it bought 10 years ago.

At least $10,000,000 should be appropriated to this work annually to complete the job.

REVETMENTS

The 16 cut-offs which have been completed on the Mississippi River shortened the river 170 miles. This resulted in an increased slope on the flow line and a lowering of the flood heights. At Memphis the flow was lowered 1.5 feet and 12 feet at Arkansas City. The grade height of the levee was lowered to correspond with the new flow line, and this produced large savings in the cost of enlarging the levees to the project grade and section. But the increased slope accelerated the velocity and increased the rate of caving on the riverbanks. These caving banks are not only a menace to the levees but are a hindrance to navigation. As much as 10,000,000 cubic yards of earth has caved into the river at one point in 1 year, which resulted in deteriorating the channel conditions. Such large quantities of material dumped into the river necessitates extra channel dredging to maintain navigation. The high banks, which are generally being cultivated, cave into the river and are eliminated from cultivation for a generation or more. (The material that caves into the river drifts downstream to form bars or islands that may eventually build high enough to be cultivated.) The channel attempts, by caving its banks, to regain its original length with the result that the flood height is raised and, if not controlled, the levee grades must be raised.

If the caving banks are not controlled, the levees become endangered and must be set back. Large areas of highly developed land must be placed on the unprotected side of the levee or caved into the river, the improvements moved back, and large sums spent to build loop levees. Then a longer revetment must be built to eventually stop the caving.

The vicious circle generated by a caving bank can be eliminated if funds are available to stop it in its incipiency. Therefore at least $40,000,000 should be made available annually for this work for a period of 3 years to permit this type of work to catch up. Enough plant is available to place the revetment suggested if funds were appropriated to do the job.

NAVIGATION ON THE MISSISSIPPI RIVER

The river today is more important to commerce than at any period since the early days, before railroads, when it was the main source of travel. Freight handled in 1949 was about 8,500,000,000 ton-miles between Cairo and Baton Rouge. The 10-year average, 1940 to 1949, inclusive, was about 5,500,000,000 ton-miles.

The 10-year average included the war years when more than 1,000 war vessels were constructed on and floated down the river and tributaries.

Bank stabilization is most important to navigation. The 12-foot channel at low water cannot be successfully constructed until the banks are stabilized. Although Congress authorized the 12-foot channel on December 22, 1944, only a 9-foot channel is being maintained.

Completion of the revetment program is important to navigation.

The cheaper rate that water-borne traffic carries is a big factor in the economy of this Nation.

The construction of such terminals as that being constructed at Memphis are valuable assets. Such terminals add much to the expanding industry that river traffic is developing.

THE ST. FRANCIS RIVER BASIN

The St. Francis River is 475 miles in length and drains 8,400 square miles of area in Missouri and Arkansas. I will discuss the area in Arkansas, which consists of approximately 2,760 square miles, or about 1,766,000 acres. It is bounded by the Missouri-Arkansas State line, the Mississippi River, and Crowleys Ridge (2,500 square miles of this area is in the St. Francis levee district). The maximum width is 45 miles. Many generations passed during the formation of this alluvial valley. It is flat, fertile land, and is adapted to row crops.

House Document No. 132, Eighty-first Congress, first session, gives detailed information about this basin in Missouri and Arkansas. H. R. 5472, Eighty-first Congress, first session, was passed by the Congress, and it was approved May 17, 1950, and $20,000,000 was authorized for flood protection and drainage improvement in the St. Francis Basin.

Until 1900 very little progress had been made to develop this basin, and the development was mainly on the high banks of the Mississippi and St. Francis Rovers. The area between these rivers was chiefly swamp land, covered with virgin hardwood timber.

Between 1908 and 1920 nearly all of more than 2,400 miles of drainage ditches were constructed at a cost of more than $28,000,000 to the property owners. The ditches were constructed by drainage districts of various sizes and shapes to attempt to meet local needs. Floodways were constructed on Little River and St. Francis River in which a large part of the floodwater is carried above ground between levees. Sixty-six drainage districts cover the basin. Maintenance is paid generally by an annual tax, and several districts are now floating new bond issues for recleaning and enlarging their respective drainage systems.

Many bottlenecks occur because the various districts are not coordinated. An outstanding one is at the Missouri-Arkansas State line. In the early days of drainage the flow into Arkansas from Missouri was fairly satisfactory, but continued ditching in Missouri, especially farm ditching, delivers the flood to Arkansas much more rapidly. Some of the old systems are inadequate; a revised system must be constructed that has been planned to cover the whole area embracing both States. The St. Francis Basin project, designed by the Corps of Engineers, will make the needed corrections as it is set out and authorized by H. R. 5472, Eighty-first Congress, first session.

Wappapello Dam assists in controlling the floods in the upper reach of the St. Francis River, and a diversion channel carries part of the flood flow to the Mississippi River at Cape Girardeau, Mo. But the middle section is flooded from headwaters and the lower part of the valley by backwater.

THE BACKWATER AREA

When the Mississippi River is at high stage the water backs into the St. Francis Basin around the end of the levee. This added to the headwater of the St. Francis covers an area of approximately 768,000 acres.

Flood damage in the St. Francis River Basin causes an average annual crop loss of $5,660,000 (current prices February 1947) page 14, House Document No. 132, Eighty-first Congress, first session—505,000 acres in the backwater will be benefited by the proposed plan, of this amount 360,000 acres are in cultivation (p. 34). Flood damage, other than crops, amounts to $185,000 annually (p. 35), which added to the crop damage is $5,845,000 total average annual loss.

AGRICULTURE

Cotton is the chief crop in the St. Francis Basin in Arkansas. But corn, alfalfa, soybeans, and small grains are important crops.

The greatest need in this valley is levee protection and drainage. The levees are the backlogs of all our development. But drainage is essential to the growing of crops. The proposed plan for flood control and drainage in this basin will permit large additional areas to be put into cultivation; it will mean much larger production for the land in cultivation.

For 1951 the Nation is asking that we grow 16,000,000 bales of cotton. In 1950 we grew approximately 9,800,000 bales. To clothe this Nation it takes about 10,000,000 bales annually. Our population is increasing at the rate of about 3,000 per day; 6,000,000 bales are needed for export. Besides the fiber we get cottonseed oil for human consumption. This constitutes a large part of vegetable oil of the Nation.

An average ton of cottonseed produces approximately 325 pounds of cottonseed oil (46 gallons), 850 pounds of cottonseed cake or meal, 190 pounds of cottonseed linters, and 500 pounds of cottonseed hulls. Of the 190 pounds of linters 60 pounds goes into the manufacture of mattresses, automobile upholstery, etc. The 130 pounds goes into making guncotton.

Cottonseed meal and hulls make an important feed for cattle; generally a ton of cottonseed produces at least 1,350 pounds of cattle feed.

Guncotton, clothing, tents, and most accessories of all branches of the armed services are dependent on cotton.

ST. FRANCIS LEVEE DISTRICT, ARKANSAS

Mr. HUXTABLE. Following our able president of the Mississippi River Commission, General Feringa, whom we are very proud to have in our valley and following these two able lawyers, I as an engineer am a poor fellow to talk. We have a tremendous problem in the valley. We need a lot of money to complete our project. We have not had any levee failures recently, but we still have a lot of levees that are not completed. Of course that is always a threat to us when we have our major flood.

Chairman MCKELLAR. When was the last one?

Mr. HUXTABLE. The last one we had was in 1937. That was one of the largest floods we have had. Since that time we have done a tremendous amount of work in raising to grade and a good many other things to strengthen our levees.

In the State of Arkansas we have 393 miles of main levee on the west bank of the river and of that amount about 25 percent is still incomplete.

Now from the State line down to the mouth of the St. Francis we have in my district 158.3 miles of levee. From the St. Francis down to the White, 74.5 miles, with 41 miles of back-water levee in here. Then from the high land on the south bank of the Arkansas down to the Louisiana line there are 160 miles. Now in this low area only 14 miles of that levee needs to be completed, but of that amount there are 4½ miles on the Mississippi proper and the other 9½ on the Arkansas, which are the very ones which would flood all of southeast Arkansas and northeast Louisiana.

Senator MCCLELLAN. You already have a condition in southeast Arkansas where without a flood they have backwater in there that creates a problem, they are unable to till a lot of that land in there now. We have a project of drainage coming up from Louisiana, that is also involved in this program.

Mr. HUXTABLE. That is true, Senator.

INCOMPLETED LEVEE

Now in this area between the St. Francis and the White we have about 34 miles of that levee on the main stem that is not completed.

Chairman McKellar. When will that be completed?

Mr. Huxtable. It depends on you gentlemen, whenever we get the money.

Chairman McKellar. Ordinarily when would you expect to complete it?

Mr. Huxtable. That is a rather large question, Senator. In the first place, my district, for instance, is 38 years old. The Government began to help us in 1917 in a way and in 1928 took over the construction. We furnished the right-of-way and paid all the damages and maintained the levee. In my district it cost $50,000 a year to maintain it. We have been hoping that the time would come when we would get enough money a year to go ahead and complete these levees. We have thought the last 5 or 6 years that since the war was over we would get $100,000,000 a year and that would let us go on and complete the job. As it is, we get these small appropriations that do not let us progress very rapidly. For instance, in my own levee here I have 158.3 miles of main levee; 50 miles of it is not complete; 21 miles of it is below grade. We have been hoping, of course, against hope that we were going to do that. Now with the set-up if we complete 5 miles of my levees this year that will leave me 45.

CONSTRUCTION FOR 1952

Senator McClellan. That means out of this appropriation of $61,000,000 you will get only 5 more miles of your levee complete, 5 out of the 50?

Mr. Huxtable. That is right.

Chairman McKellar. You hope to get that allocated to you by the Board?

Mr. Huxtable. Yes, sir; that is right.

Senator Cordon. How much per mile does it cost?

Mr. Huxtable. It costs about $50,000 per mile to enlage the levee, Senator. It is by contract to the contractors who have the equipment.

Senator Cordon. You say that is $50,000 a mile and you have 5 miles, that is $250,000?

Mr. Huxtable. That is right.

Senator Cordon. Out of a total budget of $61,000,000?

REVETMENTS

Mr. Huxtable. Yes, sir. Let me tell you some more things we are going to have to spend some of that money for. One of the main things we have to spend money for, we spend most of our money for revetments. That is very important, you see.

Senator McKellar. That is very expensive, too?

Mr. Huxtable. Very expensive.

Senator Cordon. You cannot put any revetment in until you build that levee?

Mr. Huxtable. Yes, sir; we need the revetment whether we enlarge the levee or not. The fact is that if the present commission

asked me which I would rather do, revet a caved bank that is coming into my levee or enlarge the levee, I would tell them to put the revetment in first, because otherwise we may lose that levee and have to set it back. All these loop levees we build do not give us any progress. We only spend money and are not extending our protection.

Senator CORDON. Yours is the St. Francis district?

Mr. HUXTABLE. Yes, sir.

Senator CORDON. In the House hearings on page 331 I notice where the Linda levee enlargement cost $90,000, the Huffman levee enlargement $160,000, and the Bledsoe levee enlargement $300,000, for a total of $550,000 rather than $250,000.

Mr. HUXTABLE. Some of that is not in my district, sir.

Senator CORDON. That is all St. Francis.

Mr. HUXTABLE. The Bledsoe is the only one in my district. They estimated $300,000. I am saying the average cost of enlarging our levee has been about $50,000 per mile. It is true that that particular area will be a little more expensive than some of the others because it has some features about it and we have more work to do on that one than we have on some of the others. It depends on the section of the levee you have to start with. That is one of the things.

Senator ELLENDER. How many feet under grade is the levee?

Mr. HUXTABLE. You mean the one that I say is below grade?

Senator ELLENDER. Yes.

Mr. HUXTABLE. I can tell you, Senator Ellender, we have some of it that is 2½ feet below the project grade. A lot of it will be only about a foot, but after all that is a pretty squeamish thing when you have a big flood. We have been so fortunate in the last few years to have been able to fight off any crevasses; we have had hard fights in order to keep from having crevasses. In 1937 we spent enough money down there to try to hold a levee, to enlarge a lot of it, of course. That is the point about it, we want to try to get it up there so we will not have these emergency fights.

Senator MCCLELLAN. In other words, this is the point you are making. Until you get them complete you are going to have to continuously spend money for temporary protective measures that ought to go on the construction of the levees themselves?

Mr. HUXTABLE. That is very true.

Senator MCCLELLAN. And much of the money you are now spending to hold the levees and protect until you can get them completed will not have to be expended after the levees are built to grade and section?

ESTIMATED YEARLY COST TO COMPLETE LEVEES

Mr. HUXTABLE. That is the point. That is why we think it would be economy for the Federal Government if we could go ahead now and spend $100 million a year to let us get this completed.

Chairman MCKELLAR. How long do you think it would take to complete the levees if you had $100 million?

Mr. HUXTABLE. Senator, of course the Commission is faced with so many problems and so much work, not only on the main route but on some of the tributaries, our revetment program is one we think we ought to spend $40 million a year on for about 3 years and let us get ahead. We have had a lot of this fire-fighting stuff to do to stop this caving banks before they come into our levees.

You see, we made 16 cut-offs on the main stem of the river which shortened the river about 170 miles, and by that means we lowered the stages a foot and a half in Memphis and 12 feet down in Arkansas City. Now our new grades are laid parallel to the new slope on that. Well, if the river is permitted to continue to cave banks, it increases its length and by that means raise the flood again, and naturally we will eventually have to raise our grades and have another round of this raising of grades. If we had the proper amount of funds for our revetment program, we would not have that thing to do. We ought to get this river in such shape that it would not be so hard to hold.

Senator McCLELLAN. At $100 million a year it would take somethink like 5 years to complete the job?

Mr. HUXTABLE. I think so.

Senator McCLELLAN. Am I correct, General?

General FERINGA. About 6 or 7 years.

Senator McCLELLAN. I will ask the general. The question has arisen here, suppose you got $100 million a year, how long would it take you to complete what we call the lower Mississippi River project?

General FERINGA. Six or seven years, sir.

SEDIMENT PROBLEM

Senator HOLLAND. I was interested in your statement about the fact that the deposits and also the making of the channel crooked would necessitate the raising of your grades again. How much does the deposit of sedimentation aggravate your problem?

Mr. HUXTABLE. Senator, the trouble is that these bends in the river here, where this river comes out to that sharp point it continues to work in a little of that. This black line is our levee over here. Some of these bends in the river— particularly at this point here, what is known as Cow Island Bend, that is where we get in close to the levee and we have about 2 miles of revetment in front of that point. We now complete about a quarter of a mile or half mile of revetment a year, but that is about all the funds the Commission can spare us. We ought to go on and run it down much farther. We have the same problem all down this river.

Senator HOLLAND. Referring to that bend in the river, that black spot there indicates revetment work?

Mr. HUXTABLE. That is right.

Senator HOLLAND. And wherever those occur next to the blue line, the river, in between the levees and the river, that means revetment projects?

Mr. HUXTABLE. Yes, sir.

Chairman McKELLAR. Is that in Arkansas or Missouri?

Mr. HUXTABLE. That is in Arkansas. This is on the Mississippi side. These are the levees on the Mississippi side in the State of Mississippi.

Senator HOLLAND. I do not think you have answered my question yet. You have said if the river was allowed to get crooked again and if sedimentation took place there—I do not believe you used that word, but I understood that was what you were talking about—you said you would be forced to raise grades and levees. Does that mean

that sedimentation is taking place and the channel is choking up so you will have to keep raising the levees?

Mr. HUXTABLE. Let me try to explain that to you right here.

General FERINGA. Mr. Huxtable, may I interject a moment?

Senator Holland, the river bed itself is not raising up at all, sir. Over the entire river there may be a bar form one year and a low spot the next year but the entire bed of the river is not rising. It has always been that way.

Chairman MCKELLAR. It remains the same all the time?

General FERINGA. Over the whole river; yes, sir. There may be a bar here and a hole there. Now what has happened by the cut-offs is a general shortening of the river; and Mr. Huxtable is stating that if that shortening is lost and those bends are restored, then again you have a longer river and higher stages and it takes longer for the water to get to the sea, sir.

Mr. HUXTABLE. May I explain at Greenville there was a series of bends here that have been cut across and straightened the channel out to this present condition. Arkansas City is right up here. Now that lowers the water in Arkansas City 12 feet. Similarly all the bends that have been cut on up the line. The last one was right in here at Harding Point. All those things have tended to lower the river, but we also get an increased velocity by that means which causes us to have a greater scare. If we can revet those bends in the initial stage, right at the incipient stage of it, the cost is not so great. If we do not have the money to do it, we have to let the things run on and spend maybe four times as much to stop that caving. But it has to be stopped eventually or else it will breach some of our levees. We turn out maybe 400 or 500 acres of well-cultivated land. We set the farmers' buildings all back in cotton fields generally and then they have to start in all over. We lose all that good land to the river. If it does not cave into the river, it is unprotected.

My district has 1,600,000 acres. We are hoping that we can eventually get our levee completed so we do not have the fear of these big floods which causes tremendous losses.

Chairman MCKELLAR. You have not had a big one since 1937?

Mr. HUXTABLE. 1937 was the last year. In 1950 we had a very great flood.

Chairman MCKELLAR. Not an unusual one?

Mr. HUXTABLE. It was about the third largest.

LEVEE BREAKS, ARKANSAS

Senator MCCLELLAN. Did you not have a lot of breaks in the section of northeast Arkansas?

Mr. HUXTABLE. The levees on the St. Francis River were the ones we had the breaks on.

Senator MCCLELLAN. I know you had to move people out of there and fight the levees to try to hold it.

Mr. HUXTABLE. That was due to the headwater on the St. Francis and the backwater that comes into the lower part. I would like to show you for just a minute. I have a map. It might be well to show you how these things work.

This is the drainage coming down the Missouri [indicating]. This is the Missouri line here. This is our backwater area. The backwater

backs around the ends of our levee and floods this whole area here.

Chairman McKellar. Backs from the Mississippi?

Mr. Huxtable. Yes, sir. In this particular area that represents about 760,000 acres which we hope to continue by building in levees down here and cutting out all this flooded area.

Senator McClellan. Is that the White River or the St. Francis?

Mr. Huxtable. That is the St. Francis River. I would like to talk an hour about that but I know time is too short. I would like to say in the construction of these levees my own district has spent more than $24,250,000 that the taxpayers there have spent on this 158 miles of levees.

Chairman McKellar. How much have you received from the Government?

Mr. Huxtable. About $22,000,000 from the Government and $24,250,000 from the local taxpayers, which makes $47,250,000 we have spent on that levee.

Senator McClellan. I have intended to try to bring that out and if you have not been requested to do it, General, I should like to have you place in this record what the local interests have spent in the lower Mississippi from Cape Girardeau to the mouth.

General Feringa. I have placed that in the record. I did that Friday morning. I can repeat the figures if you wish.

Senator Stennis. Let us have them repeated.

General Ferina. It gives me great pleasure to repeat the figures, because I think it is important. Local interests in 1714 until 1928 spent $292 million. Let me repeat, from 1714 through 1928, $292 million, and those are prior to 1930 dollars, of course. From 1928 to 1950 they have spent $46,500,000, sir.

Senator McClellan. That makes it close to $340 million, in round numbers.

General Feringa. Yes, sir.

Senator McClellan. Now that is what local interests have spent for levees alone, is it not?

General Feringa. That is for levees, sir.

Senator McClellan. That was not for navigation?

General Feringa. That is correct, sir.

Senator McClellan. That was for levees, for what you call strictly flood control?

General Feringa. Yes, sir.

Chairman McKellar. That included revetments?

General Feringa. That includes all the money they spent, sir, for levees alone, sir.

Chairman McKellar. What has the Government spent since 1927? Do you have those figures?

General Feringa. Yes, sir.

Senator Stennis. While the general is looking for those figures I might observe you could take the next witness, if you want to, because some of the Senators may want to leave.

Mr. White. We are all sorry that Mr. Frank Pidgeon cannot be here, but, as General Crawford has stated, it is due to the serious illness of his wife. We are especially sorry about her illness.

The next witness I would like to introduce is Mr. Will T. McKie, of Mississippi.

TOTAL COST OF LEVEES

General FERINGA. Mr. Chairman, if I may finish; the United States has appropriated $721,954,570, all of which has been expended or scheduled for expenditures.

Senator MCCLELLAN. That includes navigation, revetments, and levees?

General FERINGA. Yes, sir.

Senator MCCLELLAN. Do you have the breakdown as to the levees alone?

General FERINGA. Yes, sir.

Chairman MCKELLAR. He stated it the other day.

Senator MCCLELLAN. Put it in a breakdown showing the total.

General FERINGA. $198,392,000 have been spent for levees; for bank stabilization, $178,504,000.

Senator MCCLELLAN. Then the local interests have spent nearly as much in that valley for flood control and revetment and bank stabilization as has the Federal Government on this project, excepting navigation?

General FERINGA. Yes, sir; and then if you would apply the factor of what the pre pre-Revolutionary dollar meant, for instance, to what the dollar means now, you would get it more in their favor. The total spent by the Government is $721,954,570.

STATEMENT OF WILL T. McKIE, CHIEF ENGINEER, YAZOO-MISSISSIPPI DELTA LEVEE DISTRICT

YAZOO-MISSISSIPPI DELTA LEVEE DISTRICT, MISSISSIPPI

Mr. MCKIE. My name is Will T. McKie, chief engineer for the Yazoo-Mississippi Delta levee district, located at Clarksdale, Miss.

Mr. Chairman and members of the committee, before proceeding with my testimony I have a prepared statement from the Honorable Will M. Whittington, Member of Congress, chairman of the Flood Control Subcommittee and president of the Mississippi River Flood Control Association. Mr. Whittington was very sorry that he could not be present at these hearings and asked me to present his statement to the committee with the request that it be inserted in the record.

Chairman MCKELLAR. It will be inserted in the record.

(The statement referred to is as follows:)

STATEMENT OF WILL M. WHITTINGTON, PRESIDENT, MISSISSIPPI RIVER FLOOD CONTROL ASSOCIATION

Mr. Chairman, as president of the Mississippi River Flood Control Association, I urge that at least the $59,000,000 for the lower Mississippi River and tributaries in the bill as passed by the House, be adopted by the Senate.

The President, in his budget message, recommended $61,000,000 for the next fiscal year. I believe, in all the circumstances, that the Senate would be justified in appropriating this amount. Under normal conditions and in view of the importance of the adopted projects, I would urge that the budget recommendation be increased by you. In view of the enormous appropriations on account of the Korean War and in behalf of the national defense, I do not ask for any increase in the budget recommendation.

SEVEN STATES

Seven States are greatly interested in the appropriation for the Mississippi River and tributaries. They are Illinois, Missouri, Kentucky, Tennessee, Arkansas, Louisiana, and Mississippi.

THE PROJECT

The adopted project covers the Mississippi River from Cape Girardeau to the Gulf. It now includes the St. Francis River Basin in Missouri and Arkansas; the White River Basin below Augusta, Ark.; the Arkansas River Basin below Pine Bluff, Ark.; the Boeuf-Tensas River Basin, La.; the Red River Basin below Alexandria, La.; the Atchafalaya Basin in Louisiana; and the Yazoo River Basin and interior streams in the Yazoo Basin, Miss.

There are about 1,600 miles of main river levee along the Mississippi River, approximately 75 percent of which are now completed. The project includes some 2,000 miles of smaller levees on tributaries and on floodways and in the backwater area of the tributaries of the Mississippi River. It also includes five reservoirs, three of which are now completed, the remaining two of which, the Enid Reservoir and the Grenada Reservoir, are substantially 85 percent and 50 percent respectively, complete, and both of which are located in the Yazoo Basin. The project also includes cut-offs to reduce flood heights. They are substantially completed. The project embraces floodways. All of these are completed except the Morganza and the Atchafalaya floodways, which are approximately 60 percent complete.

RESERVOIRS

The Enid and Grenada Reservoirs have been under way for several years. They are located above the city of Greenwood in the Yazoo Basin where excessive and successive floods have occurred for the past 7 years. They are essential for the protection not only of the city of Greenwood but of other important cities and communities below the city of Greenwood, including Belzoni and Yazoo City. Greenwood has suffered one overflow after the other annually for years. The completion of the reservoirs is essential to make effective the work already done on the reservoirs and the protection that will result when the reservoirs are completed. They are flood control reservoirs. No power is involved. They will be of no benefit until completed. The sooner they are completed the better it will be not only for the Yazoo Basin but for the lower Mississippi Valley.

NO NEW PROJECTS

No new projects are contemplated. The largest amount of the appropriation would be for bank stabilization. It is important to protect the levees that have been constructed, and to provide for the navigation contemplated by the projects.

IMPORTANCE

The adopted project is so important and essential that in World War II, when flood control appropriations were discontinued generally, appropriations were made to carry on the work along the lower Mississippi River. The river bisects the Nation. It involves transportation and communications that are essential in war.

As I have stated, appropriations were continued during World War II but at least the amount of the appropriation carried by the House is essential because the costs of construction have almost doubled since World War II.

MAINTENANCE

Approximately fifteen million dollars of the appropriation is required for annual maintenance. I am familiar with the breakdown. The principal item of construction is bank stabilization. It cannot be delayed. It would be disastrous to postpone. The works in all of the 7 states are important.

I believe the committee will be justified in reporting the $61,000,000 for the fiscal year 1952 recommended in the budget message.

Mr. McKIE. Gentlemen, I also have a prepared statement I would like to insert in the record, and then very briefly point out some of the things I have in it, and add a few remarks.

As the committee knows, each of us personally appeared before the subcommittee of the House and submitted written statements in which we gave factual statements showing the great need for work in the sections which we represented. By doing this from each of the several States of the valley we hope to bring before that committee a complete picture of the great amount of work that is needed throughout the entire lower valley.

Senator STENNIS. Mr. Chairman and Mr. McKie, may I interrupt? I believe it will help if you will point out on the map to the members of the committee the area which is represented by the Yazoo-Mississippi Delta levee district.

Mr. MCKIE. Yes, sir. The main flood problem in the alluvial valley of the Mississippi River in the State of Mississippi is what is commonly referred to as the Yazoo Basin or the delta section extending from Memphis, Tenn., to Vicksburg. This part of our State comprises an area of around 4¼ million acres.

Chairman MCKELLAR. That is indicated by the light color that goes all the way from Memphis to Vicksburg where you have the pointer?

Mr. MCKIE. From Memphis to Vicksburg and from the hill line to the area.

Senator STENNIS. That area which you call the Yazoo-Mississippi Delta levee district of which you are the chief engineer?

Mr. MCKIE. There are two levee districts responsible for the main line levees in this area. One is known as the Yazoo-Mississippi Delta levee district, which has as its responsibility the maintenance of the upper 100 miles about here.

Chairman MCKELLAR. From Memphis south about 100 miles?

Mr. MCKIE. Yes, sir. The other, the Board of Mississippi Levee Commissioners, which has 170 miles to the north of the Yazoo River, or above Vicksburg. In other words, this entire area of some 4¼ million acres, most of which is in a high state of cultivation, well developed. Actually we have within this area, gentlemen, approximately one-fourth of the usable agricultural area of the entire alluvial valley. It is protected by this one continuous line of levee 270 miles in length.

Senator ELLENDER. How much of that levee is under grade?

Mr. MCKIE. I have that in the House record, sir.

Senator ELLENDER. Will you supply it for the record?

(The information referred to is as follows:)

The total length of the Mississippi River main line levee on the east bank between Memphis and Vicksburg is 270.9 miles, of which 205.6 miles is up to project grade and section leaving 65.3 miles or 24 percent to be completed to project grade and section.

Chairman MCKELLAR. By the way, we were talking about names a while ago and we were talking about the pronunciation of Cairo. Where did the word "Yazoo" come from?

Mr. MCKIE. I do not know, sir. It is an Indian name. There was a tribe known as the Yazoo tribe.

Chairman MCKELLAR. Go ahead.

Mr. MCKIE. Gentlemen, I would like to digress a little from the general trend of testimony that has been presented. We know that the Army engineers have given to this committee a very detailed factual statement of the status of this project and the work that ought to be done.

Chairman McKellar. The best I have ever heard.

CONTROL OF RIVER STUDIED SINCE ACQUISITION BY LOUISIANA PURCHASE

Mr. McKie. Yes, sir. There is no reason for me to try to improve on their facts. I would like just simply to remind the committee that the improvement, the control of this lower Mississippi River, has challenged the thinking of statesmen, engineers and ordinary citizens since the jurisdiction of the river was transferred to the Federal Government by the Louisiana Purchase. In 1822 Bernard & Totten of the Army Corps of Engineers submitted the first official report on the lower river to the Seventieth Congress, second session, in House Document 35. That was 129 years ago.

In 1845 a convention of the Southern and Western States was held in Memphis, Tenn., for the purpose of considering the general interests of these States and particularly the improvement of the Mississippi River. Resolutions adopted by that convention were reported to the Twenty-ninth Congress, first session, Senate Document 410.

We know that a long line of presidents have endorsed the improvement and control of the river by the Federal Government and reflecting on this long period of time when we have been discussing flood control in the lower valley it just seems strange to me that we are not further along than we are.

I have a quotation from President Garfield accepting the nomination for the Presidency in which he says:

> The wisdom of Congress should be invoked to devise some plan by which that great river shall cease to be a terror to those who dwell upon its banks, and by which its shipping may safely carry the industrial products of 25,000,000 people.

That will show you how far back that was.

The wisdom of Congress has been invoked. The plan has been devised. During these 130 years that the Army engineers have been studying this river, they have submitted numerous reports to subsequent sessions of Congress culminating in what we think is a master over-all plan for the improvement and control of this river.

As I said, the project as it stands today is only 56 percent complete, although the basic act we are operating under now was passed in 1928.

Chairman McKellar. Mr. McKie, you would say that since the Federal Government took over the project in 1927 the Corps of Engineers has certainly done a wonderful job on this river; is that not true?

Mr. McKie. It certainly is, sir. They have done a magnificent job. They have taken the funds which have been made available to them through the years and so efficiently and wisely distributed those funds that almost every section of this entire valley now enjoys an almost equal measure of protection. But as of today no section of this valley has the complete protection which its importance to the Nation should justify and which it is promised by the plan authorized by Congress to be carried out.

Senator Young. Are you appearing for all the projects up and down the Mississippi River or just those in the lower Mississippi?

Mr. McKie. The Lower Mississippi Valley and tributaries.

Senator McCLELLAN. Which includes that entire map from Cape Girardeau down to the mouth?

RESTORATION OF CUT REQUESTED

Senator YOUNG. You are appearing in behalf of the reinstatement of the $2,000,000 which the House cut from those funds?

Mr. McKIE. Yes, sir. We very earnestly petition you to reinstate that amount, sir.

Chairman McKELLAR. I think I should say, Senator Young, that the Bureau of the Budget first recommended $74,000,000. Then we got into the Korean situation and they reduced the amount. I think the President cut it down to $65,000,000. Later on that was reduced to $61,000,000, and then the House cut it $2,000,000, making it $59,000,000.

Senator YOUNG. I remember that, Mr. Chairman. I have not been able to spend as much time as I would like to on this committee, I have been spending more time on the Agricultural Appropriations Subcommittee which has been running simultaneously with this, and also the Armed Services Appropriations Subcommittee.

Senator STENNIS. Did you hear General Feringa Friday morning?

Senator YOUNG. Yes, I heard him.

Senator STENNIS. He gave a fine summary of the whole area.

Senator YOUNG. Yes.

1952 BUDGET ESTIMATE

Mr. McKIE. Following your line of thought, Senator Young, the budget figure was $61,000,000 and then the House cut it to $59,000,000, and $59,000,000, after the deduction for maintenance of existing sectors, will give us only $40,500,000 for the advancement of this project. Based on the average of $61,000,000 annually, it would require in excess of 13 more years to complete this project. General Feringa also stated that with an appropriation of $100,000,000 a year he would complete it within 6 or 7 years. Surely this would mean a saving to the Federal Government, as has been pointed out, to complete it as speedily as possible. It would also eliminate the floods that are occurring annually, particularly on the tributary streams throughout the lower valley which are costing considerable sums to the local interests in damages. But over and above that it would remove the threat of what would be a national catastrophe should any of the levees along the major basins crevasse under extreme flood pressures. For instance, a crevasse in this levee near the upper end of this Yazoo would flood this entire area [indicating].

Senator STENNIS. May I ask a question right there? Mr. McKie, if there should be a break there in this levee around the area you indicated and it flooded the area you pointed to, just what would you say the damage would be, roughly? It has been estimated that the flood of 1927 cost $2 billion. Just confine it to one break, the area you indicated.

Mr. McKIE. I have thought a lot about that, Senator Stennis, and I would be afraid to estimate the damage, even direct damage. The intangible damages could never be counted.

Chairman McKellar. Could you get the figures as to how many people live in the area in the light color there? Could you get those figures?

Mr. McKie. I think I have them.

Chairman McKellar. They have a number of prosperous and excellent cities down there. I would like to know the number of people who live in that light colored area which would be subject to overflow if the levees broke.

Mr. McKie. The population of the Delta is over one-half million and largely rural, Senator McKellar, although there are within the area 65 incorporated towns. One of them is Greenville, around 30,000.

Senator Stennis. May I ask a question right there? Mr. McKie, pin pointing your request here before this committee and forgetting for the time being your $100,000,000 figure, which is out of the question this year, do you feel that the $61,000,000 represents the absolute minimum of safety for the area for which this money is to be provided? Is that correct? If you do not think so, do not say so.

Mr. McKie. I certainly think so, Senator. We appreciate the expenses of the Government and the fact that some expenditures should be cut. Frankly I do not feel that these are actual expenditures of the Federal Government; these are investments in national strength and development. They are not just out and out expenditures. They are good sound investments to give this tremendous area protection from floods.

Senator Young. I think it is regrettable that a program as essential and pertinent as this should be labeled "pork-barrel legislation."

Chairman McKellar. I do, too. I do not know why it ever was. I do not think it is. I think it is an expenditure of Federal funds that is absolutely necessary. I may be prejudiced because I am at the head of that area, I live there, and have seen the floods myself time and time again.

Are there any other questions, gentlemen? If not, we are very much obliged to you.

(The statement of Mr. McKie is as follows:)

STATEMENT OF WILL T. McKIE, CHIEF ENGINEER, YAZOO-MISSISSIPPI DELTA LEVEE DISTRICT

THE NEED FOR COMPLETION OF THE PROJECT FOR THE CONTROL OF FLOODS ON THE LOWER MISSISSIPPI RIVER AND ITS TRIBUTARIES

Mr. Chairman and members of the committee, my name is Will T. McKie, my home is Clarksdale, Miss., and I am chief engineer for the Yazoo-Mississippi Delta Levee District domiciled at Clarksdale.

The Mississippi Valley Flood Control Association, composed of levee boards throughout the entire length of the lower river, has delegated one representative from each of the seven lower valley States to appear before this committee and plead for adequate funds to carry forward the authorized project for flood control along the lower Mississippi River and its tributaries. Each of us has previously appeared before the House subcommittee of this Congress, and submitted written statements showing the needs of that section which he was delegated to represent. In this manner we attempted to bring forth a complete view of the entire project and to emphasize the fact that a great amount of work is still urgently needed in every section of the valley. In addition, we are aware that the Army engineers have presented to committees of both the House and the Senate reports showing the status of the project. We know that you have had these factual reports presented to you and we have been admonished to be brief and not indulge in too much repetition. That will be difficult. The struggle for

protection from floods by the people of the valley has been long and of seemingly endless repetition.

The control of the floods of the lower Mississippi has challenged the thinking of statesmen, engineers, and citizens of this country from the time when jurisdiction of the entire river was transferred to the Federal Government by the Louisiana Purchase.

In 1822 Bernard and Totten, of the Army Engineer Corps, after extensive study submitted the first official report on the lower Mississippi River to the Seventeenth Congress, second session, House Document No. 35. Since that time the Army engineers have submitted numerous reports to subsequent sessions of Congress for the improvement and control of the river. These reports have been made after exhaustive study and careful analysis of collected data and have resulted in the approval by the Congress of what is, today, a master plan for the ultimate control and development of the river.

In 1845, a convention of the Southern and Western States was held at Memphis, Tenn., for the purpose of considering the general interests of these States and particularly the improvement of the Mississippi River. Resolutions adopted by that convention were reported to the Twenty-ninth Congress, first session, Senate Document No. 410.

Statesmen such as Thomas Jefferson, Henry Clay, Teddy Roosevelt, Taft, Woodrow Wilson, and many others to the present time have endorsed the develpment and control of this river by the Federal Government. Garfield in his letter accepting the nomination for the Presidency declared: "The wisdom of Congress should be invoked to devise some plan by which that great river shall cease to be a terror to those who dwell upon its banks, and by which its shipping may safely carry the industrial products of 25,000,000 people." Woodrow Wilson, in his address accepting the nomination of the Baltimore convention, stated that: "In the case of the Mississippi River, that great central artery of our trade, it is plain that the Federal Government must build and maintain the levees and keep the great waters in harness for the general use. It is plain, too, that vast sums of money must be spent to develop new waterways where trade will be served and transportation most readily cheapened by them. Such expenditures are no largess on the part of the Government, they are national investments." In a special message to Congress on July 16, 1947, President Truman said: "The economy of controlling floods as compared with the cost of continuing under the handicap of their disruptive force has been amply demonstrated."

So you see, gentlemen, the story of the effort to secure flood protection for the valley is one of constant repetition. It has been told and retold.

Flood damages over the Nation, due to increased regional development, are multiplying, and many worth-while projects have been authorized in recent years. Flood control in the lower Mississippi Valley is the oldest authorized flood-control project in the Nation. There were no new projects contained in the budget recommendations of $61,000,000 or contemplated from these funds. An appropriation of $59,000,000 as voted by the House will, after deduction for maintenance of existing works, leave only $40,500,000 for the advancement of this project. An appropriation of this amount will cause progress toward completion to be exceedingly slow and not in keeping with what should be our Government's intentions to perform its expressed obligations. Those appropriations do not so much represent expenditures but rather they are investments in national strength and development. The Federal Government already has a sizable investment and a tremendous responsibility in this project. The Corps of Engineers, United States Army, who have studied this river for over a hundred and thirty years, and who have administered this investment, have done a magnificent job. They have so carefully and efficiently distributed the funds which have been made available that each section of the valley has been accorded an almost equal measure of protection. However, not a single one of the large basins which make up the lower valley has been accorded the complete protection which their importance to the Nation justifies, and which the presently authorized project promises. As of today the project is only about 56 percent complete. Based on the appropriation as recommended by the budget it will require over 13 more years to complete the job. Reflecting on the long years which have passed and this indication of more long years ahead gives rise to the conclusion that the project has never been prosecuted with sufficient speed. Certainly its progress should not be retarded. A speedy completion of this project would surely result in a saving to the Federal Government, would bring to an early end the annually recurring flood losses, and more quickly remove the threat of catastrophe which the uncompleted flood control works

hold over the valley. If it is not fiscally possible to accelerate the program we do earnestly petition that the appropriation be restored to the budget figure of $61,000,000.

SITUATION IN LOUISIANA

Mr. WHITE. I would like to conclude with some comments, representing the State of Louisiana.

The department of public works in Louisiana represents the 20 levee boards, and the levee boards and my department and the Corps of Engineers are very closely associated in our joint operations. I am glad to tell you that our associations have been pleasant at all times and will continue to be pleasant. We in Louisiana are very much satisfied with the manner in which the corps is operating and carrying these flood-control projects to a conclusion, and we are very anxious to see the corps receive the money that they need to complete these projects as early as practicable.

Chairman MCKELLAR. You are not asking for anything above the $61,000,000?

Mr. WHITE. No, sir.

It might be interesting to know that we started these flood-control projects 22 years ago and yet we are just slightly over 50 percent completed at this time. As you know, there are 31 States draining into the Mississippi Valley representing 42 percent of the area of the United States, and it is of special interest, it is of concern to me and I am sure of interest to all, that in the seven States comprising the lower Mississippi Valley we have 25,675,000 people, or slightly more than 17 percent of the Nation's total population.

Now we in Louisiana, of course, get all the water that comes down the Mississippi and from its tributaries, and it gives us much concern at all times that yet we might have these floods and we might have these levee breaks unless we can get these spillways in shape for operation.

BONNE CARRE SPILLWAY, LOUISIANA

Last year, in February of 1950, we had the third largest flood in the history of the Mississippi, and at that time it was necessary to open the Bonne Carre spillway 19 miles above the city of New Orleans. That took care of some 200,000 or 250,000 second-feet of water and relieved the Mississippi to some extent. Even so, the water in New Orleans reached a point in the low section of the levee to within 1 foot of the top. We can all realize what it would mean if the city of New Orleans were flooded, because the majority of the city is below sea level, and were those levees to break in the city of New Orleans, the greater portion of it would be 20 feet under water. You can realize what that would mean to the national economy.

Chairman MCKELLAR. What is the population?

Mr. WHITE. The population is slightly more than 600,000 people.

COMPLETION OF MORGANZA FLOODWAY, LOUISIANA

We are very much concerned especially about the completion of the Morganza floodway that, when completed, will provide relieving the Mississippi of 600,000 second-feet.

Chairman McKellar. Will you point out just where Morganza is?

Mr. White. Here is the Bonne Carre, of course, that I just mentioned. Now the Morganza floodway is right here. We come down through here east of Atchafalaya and get the water in the Gulf of Mexico directly.

Chairman McKellar. That has been completed about how far?

Mr. White. It has been completed only down to here, but it is not completed below Morgan City.

In 1950 the engineers were thinking of blowing the levee there and allowing this water to go down, but of course they realized that once they blew that levee that it would mean an uncontrolled spillway until the water receded down to within the banks. Then, too, had they done that, they would have had the water go around the levees, down around Morgan City, and back it up into La Fourche and Terrebonne and several other parishes in that area. That would have flooded seven parishes down below in our heavy and rich sugar belt which would have been very serious indeed. So of course this was not broken.

Now this project is underway, the Morganza control structure, and splendid progress is being made, but until that is completed and this levee completed below Morgan City, we cannot use this, and until we can use it we in Louisiana are definitely concerned and faced with floods on the Mississippi.

Senator Ellender. Mr. White, I wish you would emphasize the floods that took place around Ferriday, Jonesville, and Alexandria, due to the overflowing of the Red River and the effect that area will have on feeding the Morganza structure.

Mr. White. You see, the Old River comes from the Mississippi down into the Atchafalaya; here is the Red that drops down into Old River and from the point of Old River and the Red it becomes the Atchafalaya down to the Gulf of Mexico. Now in 1950 so much water was going through Old River that it was taxing the Atchafalaya to the point where the Red could not empty its water but only partially empty it. The balance of the water in the Red River was necessarily backed up and flooded about four or five of our parishes in that backwater area.

Senator Ellender. How high did the Red River come at Alexandria?

Mr. White. I do not recall the gage reading at Alexandria in 1950.

General Feringa. We will have that put in the record, sir.

(The information referred to is as follows:)

The maximum gage reading for 1950 on the Alexandria, La., gage on Red River was 38.03 feet.

Senator Ellender. I would like to know this, General. Mr. White, if you can give it, you may do so. How much lower would the Red River have been at Alexandria if the Morganza floodway had been completed and opened to relieve the pressure?

General Feringa. I do not think it would have been so very much lower at Alexandria, but the Red River backwater area at Acme would have been lower by about 2 feet.

Senator Ellender. That would of course have meant that a lot of the land that was covered would not have been covered?

General FERINGA. Would not have been covered; that is correct, sir.

Mr. WHITE. That was a very serious situation. The people in the backwater area were calling for the engineers to blow this levee and the people down below here were asking them to hold the levee because it would have been serious down here as well.

Now once that Morganza floodway is completed we in Louisiana will feel quite safe from flood devastation. We are very anxious to see the Corps of Engineers receive the money that it needs to complete these projects. We would like to see them get the $61,000,000 that has been recommended.

Chairman MCKELLAR. Suppose you got the $61,000,000, how much would it take to complete it and how long would it take to complete the Morganza canal?

General FERINGA. The Morganza floodway—the Morganza control structure, as I stated before, is the single most important uncompleted element, so we are going to keep on pushing that for dear life. We hope to have it completed in the fall of 1952. Now this proposed $2,000,000 cut will affect this adversely by slowing it down.

Mr. WHITE. As I said before, we are thoroughly satisfied with the work that the corps is doing. Our relations are extremely pleasant and I am sure will continue to be. The State of Louisiana is cooperating and wants to cooperate in every way with the Federal Government to assist in any way that my department can to complete these projects. We of Louisiana would certainly appreciate and the lower valley would certainly appreciate the serious and careful consideration of the Senate committee in getting back to our $61,000,000 that we so sorely need.

Senator ELLENDER. I would like to clear up a point. As you indicated a moment ago, the opening of the Bonne Carre spillway had the tendency of lowering the gage at New Orleans and thereby probably saving it from overflow.

Mr. WHITE. That is right.

Senator ELLENDER. Why does not the same thing occur, General, with reference to the point where the Red enters the Mississippi by opening the Morganza? I thought that was the reason for it.

General FERINGA. It would, sir. It would affect favorably the Red River backwater area, sir, as Mr. White brought out, if we opened the Morganza control structure and used the Morganza floodway. In this Red River backwater area the elevation of the water would go down.

Senator ELLENDER. It would not occur?

General FERINGA. It would go down and the effect on the 1950 high water would have been on the order of 2 feet. This would also act as a relief valve for the Mississippi River.

Senator ELLENDER. And for the Red?

General FERINGA. The contribution of the Red compared to the Mississippi River is small so that it will not be felt far upstream except in this Red River backwater area.

Chairman MCKELLAR. You mean that you would turn a portion of the Mississippi waters into the Atchafalaya so it can go down to the sea?

General FERINGA. Yes, sir.

Chairman MCKELLAR. If there are no further questions, the committee will recess. Are there any other witnesses on this project?

Mr. WHITE. I would like to insert my statement in the record.
(The statement referred to is as follows:)

A BRIEF IN SUPPORT OF ADEQUATE APPROPRIATIONS FOR THE CORPS OF ENGINEERS, UNITED STATES ARMY FOR FLOOD CONTROL, ON THE LOWER MISSISSIPPI RIVER IN THE STATE OF LOUISIANA

(State of Louisiana, department of public works, Col. J. Lester White, director)

We appear again before Congress with a plea to accelerate the completion of the flood-project on the lower Mississippi River. We know that the President's instructions are to decrease all civil works not directly connected with the national emergency, but we cannot agree that the flood control on the lower Mississippi River is a civil project that is unconnected with the national emergency. Any break in the levee, or the fact that the incomplete project is causing monetary loss to the State of Louisiana, is bound to have an effect upon the national economy which in turn affects our present emergency.

The greatest flood of record occurred in 1927, and 24 years have elapsed without the occurrence of a flood of as great a magnitude. We are certainly going on "borrowed" time now, and this so-called project flood could occur at any time and we are still not ready to take care of it on the lower Mississippi River. Twenty-two years have elapsed since work started on the plan to control the floods of the Mississippi Valley, and at this time we are only 72 percent complete. A great part of the remaining work affects the State of Louisiana.

We have no fault to find with the progress made on the Morganza control structure in the last few years, but we certainly cannot stand idly by and see our recommended appropriation cut to a point where we know that the State is being placed in unnecessary jeopardy.

The flood which occurred in 1950 was of such magnitude as to require the opening of the Bonne Carre spillway and also to cause the Army engineers to give serious consideration to the uncontrolled breaching of the Morganza spillway. Even with the opening of the Bonne Carre spillway the water at the city of New Orleans was within 1 foot of topping the low point in the levee. Consider what a break in the levee at New Orleans would amount to. The average elevation of the city is below sea level, and a crevasse within the city's levees would cause water to be approximately 20 feet deep over a city whose population is better than half a million. The financial loss, should a flood in the city of New Orleans ever occur, would be of such magnitude as to more than pay for the incomplete part of the flood-control program.

You have an organization in the United States Army Engineers who can economically expend $100,000,000 per year on the Mississippi River, and the present budget recommendation is a little less than two-thirds of this amount.

As stated above, the approval of appropriations only related to the national emergency should not be considered in the completion of the flood program. We earnestly request your consideration of our recommendation for $100,000,000, which is the amount that can be economically spent by the United States Army Engineers in a fiscal year. In spending the above sum, very little critical material would be involved, and the organization now existing could very easily handle it. This is the amount that was recommended last year by the Mississippi Valley Flood Control Association, whose membership comprises the citizens of all the States in the Mississippi Valley. In the seven States of the lower Mississippi Valley the population is 25,675,000 people, which is 17.1 percent of the total population of the United States. These people certainly know what is needed on the river, and we know in what danger this section of the country was during the Second World War when money and personnel were both unavailable.

We wish you to seriously consider the problem, and I am sure that if you were as familiar with it as the citizens of the valley you would know that the waterway which is used by commerce from the Gulf up to the Great Lakes is certainly an important asset and any interruption of its use by reason of an uncontrolled flood is bound to affect the national economy and, therefore, the present emergency.

Flood stages have been raised in the middle and lower Atchafalaya Basin due to the incomplete Morganza spillway. And by "incomplete" I mean not only the structure at Morganza but the lack of a gate or lock in the east guide levee in the vicinity of Morgan City and also the extension of the guide levees up to grade from Morganza to the Gulf. The gage reading at Atchafalaya station in

1950 was 2 feet greater than in 1945 with practically the same amount of water passing in the latitude of Old River. This is also causing an increase in the backwater area between the main levee and the guide levee. In 1928, when flowage rights were purchased in the Atchafalaya Basin, payment was made on the basis of anticipated flooding once in every 10 years. At the present time, due to the incomplete project, flooding is now occurring every year, and water is staying on some of the land 6 to 8 months of every year. The backwater flood stage between the main and guide levees is found to be 5 feet higher than was anticipated in 1928; and, while this is an impenetrable swamp to many, to some of our people it is their only source of livelihood as they make their living by logging during favorable times of the year; due to the frequency of floods, their operations are being seriously hampered.

The State of Louisiana has spent many millions to construct an adequate drainage system, and the incomplete Morganza project is seriously affecting the proper functioning of our drainage in the lower part of the Atchafalaya River. The 100 percent functioning of the flood-control plan would not be possible until a decision is made on the method of controlling Old River. This closure is authorized and the authorizing act requires the Chief of Engineers to determine the elevation of the control structure and other various details to take care of a project flood at this point. Until this structure is also complete, we will not have 100-percent flood-control relief in Louisiana, and the lack of a structure at Old River is affecting the State-wide drainage program of Louisiana, upon which we have spent many millions of dollars.

We know that you are being requested every day for various appropriations; but we think, if you were as familiar with the problems on the lower Mississippi River as we are, that there would be no hesitancy on your part in recommending the full amount of $100,000,000 as recommended by the Mississippi River Valley Flood Control Association, and whose resolution is really the voice of the people that will be affected.

BATON ROUGE HARBOR STUDY

Chairman McKellar. We have a statement of Mr. Willard C. Clark, chairman, Board of Commissioners of the Baton Rouge Port Authority, which has been submitted to the committee and will be inserted in the record at this point.

STATEMENT OF W. C. CLARK, CHAIRMAN, BOARD OF COMMISSIONERS, PORT OF BATON ROUGE

I submit this statement to urge upon you the necessity of including sufficient funds in the civil-functions appropriation bill now before you to permit review, by the Board of Engineers for Rivers and Harbors, of the report on the Mouth of Mississippi River, "with a view to determining the advisability of constructing harbor improvements at and in the vicinity of Baton Rouge, La., at this time". This study was requested by the Committee on Public Works of the Senate in a resolution approved on May 7, 1951.

The port of Baton Rouge is not a new port. It has been used both as a river port and a seaport since its founding in 1719. It is both an old port and an important one: an important one by virtue both of its location and of the considerable tonnages which are being, and have been for over 30 years, handled across its wharves.

That the port, by virtue of its location, is and should be of ever-increasing importance to the economy and security of this Nation, in peace and war, hardly requires demonstration. Baton Rouge is located on the Mississippi River, on the first ground higher than flood stage to be encountered above the mouth of this great river. It is at the head of deep-water navigation, 250 miles upstream of the Gulf, and is the farthest inland of the Nation's seaports.

The port of Baton Rouge is linked with the sea lanes of the world by a 35-foot channel from Baton Rouge to the Gulf of Mexico. The port is served by the most extensive network of navigable inland waterways in the world, reaching into the heart of the continent's agricultural West, ore-bearing and agricultural North, and industrial east-central area from Gary to Pittsburgh to Knoxville and South. It is connected by three major trunk-line railroads with our Nation's magnificent rail network. As a key point in Louisiana's highway system, it is

tied directly to the primary vehicular arteries serving the entire Mississippi Valley.

The importance of the port of Baton Rouge, by virtue of the tonnages crossing its wharves each year, is also easy to demonstrate. In 1948, it ranked sixteenth among the Nation's seaports in terms of tons of water-borne commerce. In 1949, the last year for which records are currently available, the commerce of the port reached all-time high—11.7 million tons. Of this tonnage, almost 1.3 million tons were foreign imports and exports, the exports comprising about 60 percent of the total; and over 4.7 million tons were coastwise receipts and shipments which, as in the case of the foreign tonnages, required the service of deep-draft, sea-going vessels. The normal import-tax revenues for the port of Baton Rouge has amounted to approximately $320,000 per year, as compared to the customs collections of $609,000 for the 1951 fiscal year. This reflects the rapid growth in importance of this port in foreign trade. During this fiscal year, 516 oceangoing vessels, in foreign and coastwise trade, called at Baton Rouge.

Although in recent years the commerce of the port has generally increased at a slightly greater rate than that of the Nation as a whole, the port of Baton Rouge is neither a "war baby" nor a "postwar baby." By the early 1920's its commerce was approaching 5,000,000 tons annually, and in 1926 reached a total of almost 9,000,000 tons, it peak for this decade. Baton Rouge, in common with all the major ports of the Nation, felt the impact of the great world depression. However, because of its strategic location, potentially one of the primary focal points of this Nation's system of communications, it rebounded strongly from this crisis, reaching a level of 7,500,000 tons in 1940 and over 8,100,000 tons in 1941. Unable to expand its facilities because of necessarily severe wartime restrictions, the annual commerce of the port was limited to approximately this range of tonnages throughout the war period.

In the past the commerce of the port consisted primarily in petroleum, petroleum products, industrial chemicals, and, more recently, aluminum ore. The marine facilities of the port consist primarily of those structures erected by several of the major industries which, recognizing the tremendous natural advantages of this area and this location, established major plants at Baton Rouge during the past 40 years. Chief among these are Esso Standard Oil Co., Ethyl Corp., Solvay Process Division of Allied Chemical, Consolidated Chemical Industries, Inc., General Chemical Corp., and the Kaiser Aluminum & Chemical Co. Several of these and allied companies are currently engaged in major expansion programs; of primary importance to the commerce of this port are the present major expansions of the Plantation Pipe Line, Kaiser Aluminum, and the synthetic rubber plant of the United States Rubber Co.; the major plant of the Ideal Cement Co., now under construction; and the large plants, soon to be built, of the Lone Star Cement Co. and the Wood River Oil Co. In addition to these, there are many industrial concerns, both large and small, whose plans for either expansion or new development in the Baton Rouge area are in various stages of advancement.

These few facts are offered in order to give those who have not had an opportunity to know Baton Rouge, its development, and its importance in peace and war to Louisiana, the Mississippi Valley, and indeed, the Nation, the background knowledge and prospective necessary to reach a decision which will be to a large extent fundamental to the natural, logical developments of this port.

We are determined to put to good use the natural advantages with which Baton Rouge and her port have been blessed. We are firmly convinced that this will be in the best interests not only of our State, but of our Nation, its economy and its defense. To do this properly, to assist our Nation in making wise and full use of another of the great gifts bestowed on her, we need your help.

We are now embarked on a program to increase the over-all effectiveness of the port in the service of the Nation's commerce. We have recently retained the Knappen Tippetts Abbett Engineering Co., of New York, one of the leading firms of port consultants in the country, to make a thorough analysis of all the problems of port development. The Board of Engineers for Rivers and Harbors were authorized, in the resolution referred to above, to review their report on the mouth of the Mississippi River from Baton Rouge to the Gulf of Mexico, "with a view to determining the advisability of constructing harbor improvements at and in the vicinity of Baton Rouge." It had been hoped that it would be possible to coordinate the study of our consultants with that of the Board of Engineers. However, the Board of Engineers will require a relatively small amount of money to be appropriated for this purpose, and we note that all moneys for engineering studies have been eliminated from the civil functions

appropriation bill recently passed in the House. We fully appreciate the need at this time for effecting wise, stringent economies in the appropriations for the coming fiscal year, and were this merely a matter of local concern, we would not encourage further action at this time.

The great value which would accrue from the coordination of these two studies, in the preparation of a reasonable and effective master plan of port development, is self-evident. However, what may not be immediately clear to those unfamiliar with this problem, is the fact that what might once have been erroneously considered "our local problem" is actually one of both regional and national concern particularly in the light of national and international developments of the past decade.

As a result of our experiences in the last great war, we have recognized the critical nature of the problem of safely and expeditiously handling the vital materials of national defense shipped into and out of this area. The proposed reactivation and expansion by the Army of the large warehouse area at Sharp's Station, as well as the current plans for the expansion of major defense industries in Baton Rouge, add further emphasis to the vital need for the immediate development of a more rounded deep-water port capable of handling efficiently the great number of commodities which cannot be served by the specialized industrial wharves which currently comprise the bulk of our port facilities.

The tremendous problems faced during the last war by both the ports and railroads of our Nation were fully appreciated by all those charged with the duty of importing vast quantities of raw materials for our industries and exporting the arms, fuels, and foodstuffs required by our armies and those of our allies.

Too late in the last war did we realize the great advantages to our national defense of the development of adequate port facilities at Baton Rouge. The benefits which would have accrued as the result of the efficient movement of export-import and coastwise traffic to and from our important local industries can hardly be estimated. Likewise, the benefits which would have resulted to defense production throughout the Mississippi Valley by virtue of the existence of adequate deep-water terminal facilities at Baton Rouge, the farthest inland deep-water port of our Nation, are incalculable. The existence of such facilities, in peace or war, will most excellently compliment those of the great port of New Orleans in the efficient movement of the commerce of the Mississippi Valley through its natural gateway, the deep-water reach of the Mississippi River. We cannot urge too strongly that this be considered in its regional and national implications.

Referring again to the great value, in this most important stage of preliminary planning, of effective coordination of the broad study of our consulting engineers with that of the Corps of Engineers, we must note the oft-proven fact that a small amount of money, spent in the initiation of a project to insure wise planning, can reap benefits in the form of savings in the cost of final execution of the works, several hundred times in excess of the amount invested in the planning. I would take this opportunity to assure you that we of Baton Rouge fully recognize our duties and responsibilities in this matter. We do not believe in a matter of this nature, that all responsibility should be foistered on the Federal Government, even though the problem has strong regional and national implications. As evidence of our good faith and sense of responsibility in this matter, we are currently spending considerable sums in the prosecution of the survey of our consultants, which will ultimately cover all phases of modern port development. We come to you for assistance only in that phase of this study which impinges upon that which is legally and traditionally the responsibility of the Federal Government—the control and maintenance of navigable waterways.

With this in mind, I would again urge you to release to the Corps of Engineers sufficient funds to permit the Board of Engineers for River's and Harbors to accomplish their mission as defined in the resolution of the Senate Committee on Public Works, as approved and forwarded to the Chief of Engineers under the date of May 7, 1951.

Chairman McKellar. The committee will adjourn until tomorrow morning at 10 o'clock.

(Thereupon, at 12.30 p. m., Monday, July 9, 1951, the subcommittee recessed until 10 a. m., Tuesday, July 10, 1951.)